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AH Philosophy Part 124

"I've some bad news, and I've some good news." This old saw is most apt in the case of this installment. First, the bad news. The *GENERAL* will show a price increase. A one-year subscription will now cost $15.00; a two-year subscription, $24.00. Individual copies will carry a newsstand price of $4.00. Now for the good—as of the first issue of Volume 25, The *GENERAL* will expand to 60 pages, while retaining the usual four-page insert. Hence, you will now have 64 pages to pour over every two months. And we'll have more room to bring you an ever wider scope of articles.

In the process, I hope to implement a number of changes I have long contemplated. These range from the trivial to the wide-sweeping, and encompass changes in layout and format and content. But, rather than trust to my own oft-questioned judgment solely, I'd like the imput of the readership on both editorial and composition policy first. On the insert of this issue the reader will find the "1988 GENERAL Readers' Survey". We would appreciate each of our friends taking the time to complete and return this sheet. It is your chance to help guide the course The *GENERAL* will take for the next few years. It is, unfortunately but understandably, all too rare that we have the opportunity to hear your collective voice on such matters; please take advantage of this chance to help make The *GENERAL* serve you even better.

Readers will, I am sure, realize that all decisions on content and format involve "trade-offs". More "Historical" coverage means less space devoted to other types of articles. A larger typeface means fewer words. An expanded "Letters" column means something else must be trimmed. Every one of the questions posed to you here represents a tough choice. So please give your responses some thought; we're asking for your valued insights, not

ASL GAP

Are you intimidated by the size of the **ASL** Rulebook? Do you enjoy games other than **ASL** and dread having to re-learn even the basics when you want to play it again? Are you an experienced **ASL** player, but find it hard to remember all the details? Are you tired of those arguments over "cocked" dice and knocked-over unit stacks? Then let the **ASL Game Assistance Program** help you! What does it do? **ASL GAP** serves as a QRDC on a computer. It includes all the following tables from the Rulebook cards:

> *Chapter A:* 3, 5.132, 11.11, 14.3, 15.1, 15.5, 16., 17.,18.2
> *Chapter B:* 25.65
> *Chapter C:* 3, 3.6, 3.7, 3.8, 3.9, 4, 7.2, 7.31-.35, 7.7, 13.33

The program presents only that information related to the results of your actions. And it keeps track of where you are in a game. It does not judge LOS; it does not cheat; it does not use a "mouse". And while the program does not teach you how to play *ASL*, it can help you to understand how **ASL** rules and situations work by seeing how the **GAP** executes and resolves them—and it also reminds you of many little-used rules you may forget during the heat of battle.

The concept is simple. For example, the IFT function asks for the FP and DRM of your attack. The program then locates the proper table, rolls some "dice" and you are told what happened to the target(s). Furthermore, it takes into account Cowering (A7.9) as well as the increased penalties for Inexperienced Personnel (A19.33); it even accounts for Critical Hits from FFEs (C1.53). It reminds you of Sniper Activation (A14.1) and offers to resolve this for you right then and there. It reminds you when ROF has been maintained (or lost) and to check for SW breakdown. Do you remember all those possibilities every time *you* roll the dice on the IFT? How about for To Hit and To Kill tables? Infantry close combat resolutions? Or Morale Checks? Do you even *use* the Battlefield Integrity rules? Now you can, and without worry. (Some sample screens from **ASL GAP** are shown to the right).

If you are a fan of **ASL** and play often, think what the program can mean in savings of time and trouble. And that means that you can concentrate on the game at hand, not the game system. **ASL GAP** is available for the 64K Apple® II +, //c, //e and //gs computers. A version for IBM® and compatible computers is currently under construction. The Apple version (only) can be ordered by mail for $25.00 from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214). Please add 10% for shipping and handling (20% for Canadian orders; 30% for overseas). Maryland residents please add 5% state sales tax.

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        ASL GAP MAIN MENU
    PFPh AMERICAN GAME TURN 1

1. Infantry Fire        7. DICE / SNIPERS
X. Infantry CC          8. GAME TURN TRACK
3. TH/TK (BLACK)        9. BATTLEFIELD INTEG
4. TH/TK (RED)          S. SAVE GAME
5. Quick Hit/Kill       R. RESTORE GAME
6. SOMTR*/HE/4          "DELETE" back to RPh

SELECT choice:
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      BATTLEFIELD INTEGRITY MENU

1. SUBTRACT AMERICAN LOSSES
2. SUBTRACT GERMAN LOSSES
3. ADD AMERICAN REINFORCEMENTS
4. ADD GERMAN REINFORCEMENTS
5. ATTEMPT TO REGAIN AMERICAN ELR
6. ATTEMPT TO REGAIN GERMAN ELR
7. RAISE/LOWER/PIN AMERICAN SAN
8. RAISE/LOWER/PIN GERMAN SAN
9. AMERICAN GAINS CVP
0. GERMAN GAINS CVP
"RETURN" MAIN MENU
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Base TK# = 7
TK# + 0 for > = 68mm gun firing AP
ammo at 6 hexes

BASE TK ROLL = 6

          VEHICLE KILLED
      CREW SURVIVAL ROLL = 4

"A" ACQUIRED TARGET ROLL (DRM = 1)
"D" TO ROLL WITH NEW DRM:
"R" FOR RANDOM SELECTION:
"S" TO ROLL SAME PARAMETERS:
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The applications, especially for solitaire play, are incredibly convenient. Can't finish a game in one sitting . . . no problem. Save it for instant recall when you begin again. Tired of your opponent grousing about his luck? The **GAP** will put an end to that. Dice roll averages for each player are continuously updated and presented on the Main Menu so that each player will always know exactly how far his overall "luck" has varied from the norm.

OPERATION CHARIOT
The Raid on St. Nazaire
By Mark Seaman

The year 1942 marked an abrupt change in the course of the "Battle of the Atlantic". The entry of the United States into the world-wide war held much promise for eventual relief from some of the burden shouldered by Great Britain, even though it would be some time before that promise could be translated into material gain. It was true that the U-boats were now carrying the war into the Western Atlantic with seeming impunity, but events were evolving that would remove from the Atlantic convoy lanes the threat of large-scale surface action by the German fleet—no mean accomplishment for the Allies.

Although forbidden to engage in equal combat by the German high command (for fear of losing what few capital ships they had), the surface raiders had already made an impact on the Allies' merchant fleets. The year 1941 saw the end of successful voyages by the battleship *Admiral Scheer* and the battlecruisers *Scharnhorst* and *Gniesnau*, and the dramatic breakout of the battleship *Bismarck*. The cruise of that 45000-ton monster threw a scare into the British Admiralty (especially after the loss of the *Hood*) and most realized that they had been extremely lucky to sink her.

As 1942 opened, the British command was aware that a second Bismarck-class ship had been completed, and priority was given to keeping this one off the convoy lanes. This was brought to the attention of Combined Operations, which had been organized to carry the war to the enemy through offensive means, limited as they might be following Dunkirk. In early 1941 commando forces had been organized with the intention of operating against select targets along a coastline that stretched from the Arctic to the Pyrenees. The first raids, small affairs, were mounted that same summer. In August 1941, the port of St. Nazaire was first proposed as a target, considered and rejected by Ad-

miral Keyes, head of Combined Operations. Now, Lord Mountbatten, the new head, was asked to consider the port as a target once more.

In St. Nazaire was the only drydock large enough to accommodate a vessel the size of the battleship *Tirpitz*, sister to the *Bismarck*. This dock had been constructed for the building of the great French liner, the *Normandie* (which took four years to complete). It could easily handle ships up to 85000 tons, being over 1100 feet long and 164 feet wide. The lock gates were two huge sliding caissons 167 feet long and 35 feet thick. The caissons were moved on cambers with the motive machinery in winding houses at the end of each camber track. A pump house near the southern end of the dock housed the machinery for filling and emptying the dock.

The British commanders reasoned that the destruction of the Normandie dock might well prevent the *Tirpitz* from ever venturing into the Atlantic. If she was damaged in combat, it would be to St. Nazaire she must steam for repairs (it was to St. Nazaire the *Bismarck* had been fleeing the previous year). The Germans had thus far shown inordinate caution in the use of their capital ships. Without the dock, it was unlikely the *Tirpitz* would sail for the convoy lanes.

But the port offered other targets that made the prospect of a raid attractive. The Germans had based U-boats at St. Nazaire and were building huge bombproof shelters to protect them from the RAF. Some of these pens were already complete and in use. The pens themselves would be too formidable for commandos, but some of the submarines might be disabled, as well as equipment and stores. More vulnerable were the lock gates that controlled the tidal action in the port basins. If these could be destroyed, the harbor would be tidal and this would, at the very least, inconvenience the U-boats. There were also bridges, power plants, and gun positions

that could be knocked out, as well as a group of underground fuel storage tanks. Close examination of the map shows that destruction of but a relatively few locks and swing bridges would at least impair the operation of the port as a whole by isolating areas of St. Nazaire. And there would inevitably be the propaganda value of a successful raid to consider. Eventually, the list of targets for the operation numbered 24 entries.

THE PLAN

By the end of January 1942, the French port was officially tagged as a Combined Operations target of highest priority and planning was underway. Two officers, Captain William Pritchard and Captain Robert Montgomery, had worked out a plan for a raid on the port the previous year. They were brought into the staff almost immediately. Much of the relevant data was in hand, with the destruction of the Normandie dock caissons the prime objective.

The idea of ramming a ship into the southern caisson and blowing it up evolved rather quickly when it became obvious that laying the charges on such a massive target by hand would be too difficult. The planning staff originally called for the use of two destroyers, one for the actual ramming attempt and one to withdraw landed commandos. The Admiralty balked at the idea of two destroyers being risked (since they were in short supply and the U-boat war was intense), and only grudgingly assented to part with one when shown that nothing smaller would survive the impact with the massive caisson. The vessel finally chosen to be sacrificed was one of the fifty Lend-Lease destroyers from the United States, the former USS *Buchanan*, now the HMS *Campbeltown*.

Unable to acquire a second destroyer, the planners settled on using a number of motor launches to carry

in the balance of the commandos, provide covering fire for them, and withdraw the raiding force at the conclusion of the operation. These were Fairmile Type B MLs, 112 feet in length and 18 feet across, displacing some 65 tons. They had a top speed of about 20 knots and were armed with twin 20mm Oerlikons. They were crewed by two officers and ten ratings, and would carry an additional 15 commandos each.

A Fairmile C Motor Gun Boat (MGB 314) and a motor torpedo boat (MTB 74) were added. The MGB was considerably faster than the other MLs, with three 850-hp engines, and more heavily armed with a 2-lber. and twin machine guns amidships; she was to be the headquarters ship for Ryder and Newman. MTB 74 was a strange craft, commanded by Sub-Lt. Micky Wynn. It had been adapted for a special mission against the battlecruiser *Scharnhorst* at Brest. The torpedo tubes were mounted far foward to launch the torpedoes over anti-torpedo nets. Special delayed-action fuses would then detonate the warheads under the target in the hopes of breaking her back. When the German ships dashed home through the Channel in February, MTB 74 was a boat without a mission, so she was added to "Operation Chariot". It was felt that Wynn could act as back-up against the dock in case the *Campbeltown* failed to ram the caisson. Four further MLs, each equipped with torpedoes, were later added to the naval force to operate against targets of opportunity.

Commanders of the raiding force were chosen with care. Lt.-Colonel A.C. Newman was placed in charge of the ground force. A veteran officer from the Essex Regiment, he had been in command of No. 2 Commando for most of 1941. Command of the naval forces was given to Commander R.E.D. Ryder. He had already served a colorful career, and was presently between commands. Ordered to attend a conference on 26 February, he did so and accepted the command before knowing what it was about. Newman only enlightened him after the conference was over.

The demolition parties were made up of hand-picked volunteers from across the ranks of the 12 Commandos, while the fighting troops (the protection parties) came from Newman's own No. 2. They were all given intensive training in dockyard demolitions and in nighttime street fighting. Under the guidance of Captain Pritchard, the demolition teams practiced until they could set their charges blindfolded. They practiced with varying numbers of "casualties" so that all would be proficient, learned what parts of the equipment of their targets were most vital, and even trained in the use of axes and sledge hammers for the destruction of sensitive parts.

Meanwhile, on 10 March, the HMS *Campbeltown* arrived at the Devonport dockyard for modification. The ship was lightened severely to reduce her draft, much of her armament being removed. Two of the four stacks were also removed and the others cut at a rakish angle to give her the appearance of a German destroyer. Quarter-inch armor plate was erected around the bridge and along the decks for protection against the anticipated heavy small arms fire, and eight Oerlikons were installed for reply. One of her 12-lbers. was retained and mounted forward.

The trickiest part of the conversion was placement of the explosive charges for the demolition of the caisson. Captain Pritchard and Lieutenant Tibbets finally solved the dilemma after some experimentation. The charge, composed of 24 naval depth charges, was encased in a steel tank and placed over fuel compartments just aft of the support for the forward gun. It was then covered with concrete. The 24 charges were linked with instantaneous cordtex fuse, which was in turn linked to two separate delayed action fuses. Scuttling charges were also placed in the stern so she could be sunk, fast against the caisson after ramming it.

All this work was completed in nine days. Her draft had been reduced by about three feet, but the planners were still worried about her passage over the mud flats of the Loire estuary. As the commando training progressed, the naval force gathered at Falmouth. The small boats began arriving on 14 March. The two escorting destroyers, *Atherstone* and *Tynedale*, arrived on the 23rd, while *Campbeltown* came in two days later. A phony cover was given the naval force in the interest of security. The 10th Anti-Submarine Striking Force became Chariot's naval designation for the benefit of enemy intelligence.

A final dress rehearsal was held on 22 March—codenamed "Operation Vivid". It was rated a failure, but the participants had learned a number of lessons. The biggest problem was found to be the glare of harbor searchlights which impeded navigation, station keeping and the landing of the troops. Unfortunately, it was to be a problem without a solution.

The defenses of the French port were formidable. In fact they were strong enough to encourage the German defenders to think that a raid against them was truly impossible. Shore batteries with guns up to 170mm lined both sides of the estuary, while searchlights and automatic weapons from 20mm to 40mm covered the approaches to the harbor. There were 43 of these weapons in or around the town itself. There were also four harbor defense boats and ten vessels from two German minesweeping flotillas based in the harbor. The Germans had some 6000 men stationed in the area, including a brigade of the 333rd Infantry Division a few miles inland. It seemed a most secure establishment, but Donitz inspected it anyway just prior to the raid persuant to a Fuhrer Directive warning of the possibility of limited British attacks from the sea. He found the local command confident that such a thing could not happen at St. Nazaire, unaware that the "10th Anti-Submarine Striking Force" had already put to sea.

THE VOYAGE

Scheduled to depart on the 27th of March, "Chariot" left a day early at the advice of Ryder. The night before, air reconnaissance photos showed four destroyers of the Wolf/Mowe-class in the harbor of St. Nazaire, but this couldn't alter their plans. The Admiralty did decide to send a further two destroyers for escort. Cover for the attack was to be an air raid laid on by the RAF. The planners of Chariot had wanted a full-scale air attack to keep the Germans busy, but political considerations caused Churchill to place restrictions on the bomber crews, allowing them to release their loads only if they could clearly see their targets. Churchill was afraid that any indiscriminate raid might injure relations with the French. Due to security demands, the bomber crews were not informed of the reason for the air raid. (Many of the pilots expressed great despair upon discovering the true nature of the operation after their air raid. Had they known they were supporting British soldiers fighting for their lives, they would certanly have pressed home their attacks with greater determination.)

Despite uncertainties, the executive order to launch Operation Chariot arrived at Falmouth at 12:30 PM of March 26. By 2:00 PM, the force had cleared Falmouth harbor. Excepting the escorts, the combined force numbered 611 officers and men.

The voyage out was quiet for the most part, only two incidents occurred to disrupt the routine. The first involved an encounter with the U-593, which was driven off by the *Tynedale*. The U-boat sent out an erroneous message concerning the heading of the force, which only served to further mislead the Germans. A French fishing fleet was also encountered, and two of the French vessels were sunk at Ryder's command (after the crews had been taken aboard the escorting British destroyers). The French, happy to be of aid to the British, convinced Ryder that there were no German intelligence agents in the remainder of the fishing fleet, and the commander ordered no more sunk. (Several of the Frenchmen taken aboard remained with the force to join the Free French upon their return to England.)

By the late afternoon on the 27th, the sky became overcast—which would lessen the dangers from enemy aerial reconnaissance. But there were disturbing reports from Plymouth of the movement of the German destroyers at St. Nazaire. These vessels were, in fact, putting to sea in response to the sighting report from U-593.

These concerns were not shared by the men of the commandos. They spent much of their time cleaning and checking their gear. They shared anti-aircraft watches with the naval ratings, and practiced with the Oerlikons and Lewis guns. Even though they had been together for a very short time, the commandos and naval personnel were unifying into a cohesive fighting force; sharing in this adventure seemed to have fostered a rare kinship. Aboard the *Campbeltown*, the men had things even better. Part way through the voyage they were informed that the destroyer would not be coming back; and thus, there was no sense in letting her considerable stores go to waste, or worse to the Germans. Up to that point, all had duly paid for what they took from the ship canteen; now it was decided there was little point to this practice, and everything was declared "on the house". Since the need for security had been so important, *Campbeltown* had been fully stocked and there was more than enough for everyone.

One ML, commanded by Lt. Briault, suffered engine trouble. The commandos were transferred to Falconar's ML (one of the extra boats). Falconar managed to catch up with the Chariot force before the final run-in, but Briault was unable to repair his engine until 10:20 PM, too late to catch up. He returned to port without trouble.

At 8:00 PM on the 27th, Ryder ordered the flotilla into attack formation. Ryder and Newman took their positions on the MGB and her commander, Lt. Curtis, took 314 to the head of the line. Two hours later, they found the British submarine *Sturgeon* at her navigation station exactly on schedule. They had but forty miles to go. At 11:30, the men could see the RAF bombers going into action over the port. The cloud cover that Ryder was grateful for proved to hamper the efforts of the British airmen. The German searchlights could be seen through the murk, but the bomb explosions were coming in single, spaced bursts and the crews struggled to identify their targets through the overcast.

The British entered the Loire estuary about 12:30 AM, still undetected. Fifteen minutes later, the lookouts sighted land—the northern shore—which meant they were now among the dangerous shoal waters. Ryder cut speed to ten knots, to keep the destroyer as high in the water as possible.

The air raid had caused some confusion among the German defenders, but its abnormal pattern and general lack of aggressiveness did more to alert them than an ordinary raid. The anti-aircraft brigade commander, Captain Mecke, quickly surmised that the raid might be a diversion. At midnight he sent a warning to all Wehrmacht command posts in the region to beware of parachute landings. By 1:00, most of the airplanes had departed, and the few remaining were milling about beyond the range of his guns. He ordered the searchlights doused, but also ordered a "continued and increased alert" with, strange for AA troops, the addition "to direct special attention seaward."

The British force navigator, one Lt. A.R. Green, put in a flawless performance. The *Campbeltown*

had eased over the mud flats (even though she grounded twice, reducing her speed to five knots), and passed the old Les Morees tower at about 1:20. One of the German harbor defense boats patrolling the main channel did spot the enemy force, but without a radio was powerless to warn anybody. A German AA battalion commander had sighted the approaching vessels five minutes before, but his initial call to the harbor commander's HQ was rebuffed. His next call to Mecke was not, and at 1:20 Mecke sent out the code message ordering all commands in the area to "repel invasion".

It was now time for Leading Seaman Pike to play out his much-practiced role. Sent along by the Admiralty for his knowledge of German signals, his task was to delay German reaction to the approach as long as possible. At this stage, minutes were precious. The British had obtained the Morse name for one of the German E-boats in the area and at 1:22, when the first searchlights came on, Pike went into action. The problem however was that the British were challenged by two enemy stations at once, one from Villes Martin on the port beam and one from the German *Sperrbrecher* ahead. A few shore positions manned by nervous German crews operating under Mecke's order also opened fire. Ryder ordered Pike to answer the shore station first. The signal was accepted, and the firing ceased. But Pike had had to cut short his message and deal with the *Sperrbrecher*. Some searchlights were still on spotlighting the little fleet, and firing from some German positions began again as Pike was flashing the German ship. He immediately switched to the German signal for "ship being fired on by friendly forces", and firing again ceased. Several minutes had been won.

But the bluff was up—for if they had truly been German ships, the boats' commanders would have halted when fired upon. Instead, Beattie now brought *Campbeltown* up to speed for the charge at the caisson. As the Germans opened fire on the accelerating destroyer at 1:28, Ryder played his last card by firing his Very pistol—loaded with what British intelligence believed to be the correct German recognition flare. But it was the wrong kind, rose only a few feet, and fell into the water. Worse, it was the wrong shade of red. On *Campbeltown*, the German flag came down and the British naval ensign went up. It also broke out on the stern of all the other little boats, and all of the guns of Chariot opened fire at the shore.

THE RAID

The ferocity of the British reply caused a temporary slackening of the German fire and put out some of the searchlights. The MGB silenced the 88mm gun on the *Sperrbrecher*. While several had been hit, none of the British boats—including the *Campbeltown* which got most of the attention—were mortally hit.

But now casualties started to mount as more German guns joined in, and the flotilla neared the docks. On the destroyer, two Oerlikons and the forward gun were knocked out. Beattie found the light house on the Old Mole (Area *342*) and used it to orient for the final run to the Normandie dock. The MGB sheared away as the destroyer went to 20 knots. At 200 yards, Beattie spotted the black line of the top of the caisson. An incendiary bomb (possibly from one of the few remaining British aircraft overhead) struck and exploded on the forecastle seconds before impact. Beattie ordered the crew to prepare for impact, felt the momentary check as the ship tore through the torpedo nets, and ordered a final change of "Port Twenty!" to hit the caisson dead center and keep the stern from the blocking the Old Entrance. At 1:34 the *Campbeltown* struck the caisson, crumpling her lower bows back some 34 feet and leaving the forecastle deck projecting
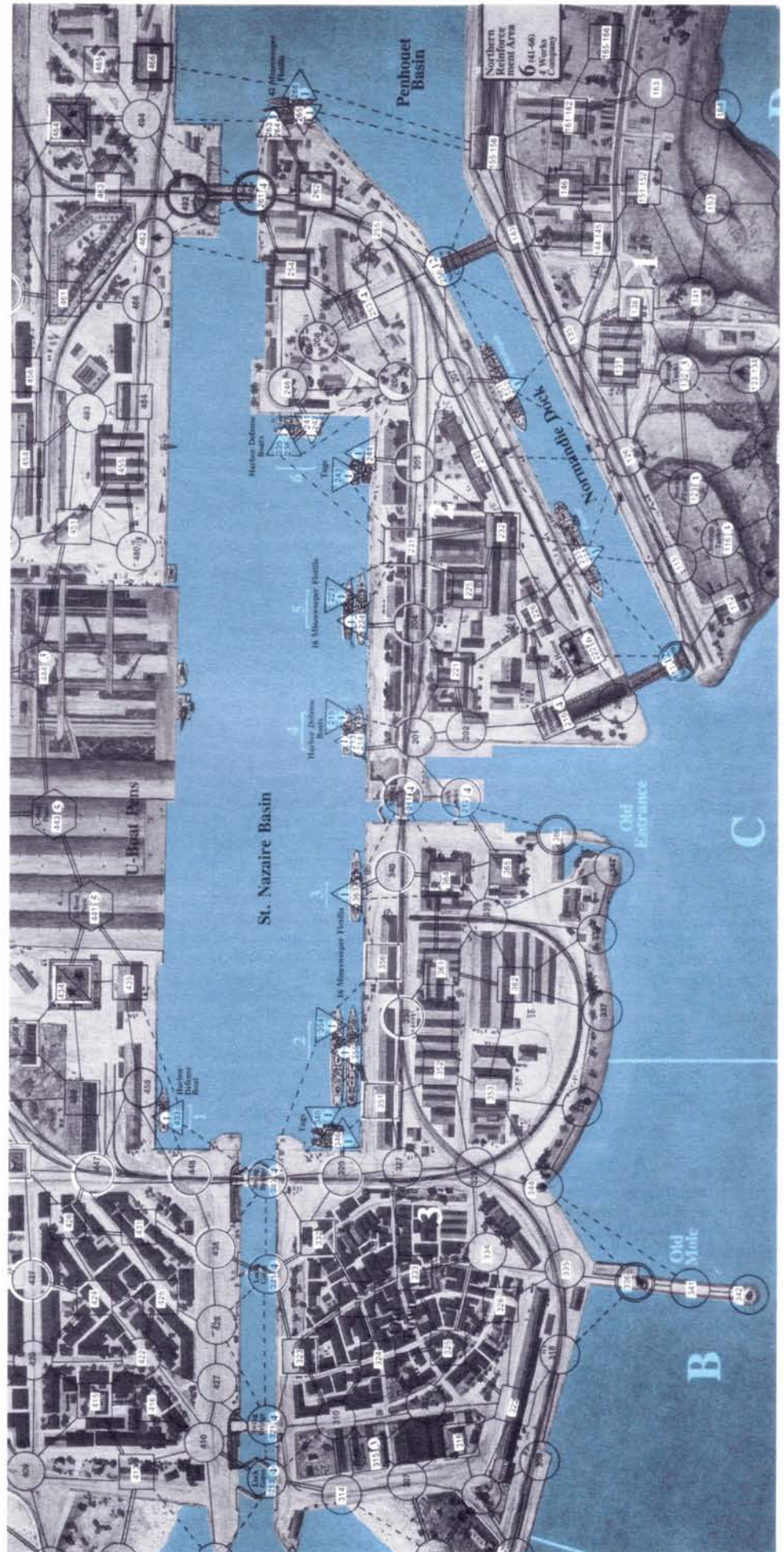
Figure 1: The Scene of the Action

a foot beyond the caisson's inner face. The commandos did not give the order to abandon ship to his naval personnel until the commandos had all disembarked. Then Chief Engine-Room Artificers Howard and Reay opened the sea valves and removed the condenser doors to let in the water. As insurance, Torpedo Gunner Hargreaves set off scuttling charges, and the *Campbeltown* began to settle by the stern with her bows held fast on the caisson. The crew were taken off by the boats of Curtis and Rodier.

(This is the critical aspect of the mission: to destroy the caissons of the dock and, in the game, these are where the largest single VP block can be earned. The ramming is straightforward, but losing speed and failing to scuttle may hurt the chances of getting full value for the Southern Caisson. The Northern Caisson—256—must be the prime target for the *Campbeltown's* commandos since its destruction, along wth that of the southern one, will yield more than a third of the points a player needs to win.)

Tibbets and Copeland, Newman's second-in-command, directed the landing from the destroyer, accomplished under a hail of fire from German batteries. Roderick's assault party left first to silence nearby gun positions and establish a defensive perimeter for the demolition squads. Roy's assault team attacked and destroyed the gun positions atop the pumping station, and then moved on to the bridge over the Old Entrance (*211*). All the practice by the demolition groups proved important and they functioned well, despite casualties and confusion.

Chant, with one of his men wounded, blew open the doors of the pump house (*222*) and headed for the main pumps below ground; 150 pounds of explosive destroyed the pumps and collapsed the floor above, saving them the need to deal with the electric motors on the ground floor. They completed the destruction by smashing gauges and instruments with hammers and setting the transformer oil afire.

Christopher Smalley's target, the winding house (*216*) was the nearest to the *Campbeltown* and he made short work of it. Charges were set on the two great wheels that moved the caisson; when the fuses failed, he calmly set new charges and was rewarded with the complete destruction of the building. Seeing Burt's launch at the Old Entrance, he led his men to it and embarked, even though the boat was at the time trading fire with enemy vessels in the St. Nazaire Basin. Smalley himself was killed while trying to unjam the ML's Oerlikons.

Brett, Purdon and the reinforcing Burtenshaw had a much tougher time at the northern end of the great dock. Their protection squad had been halved while still aboard the destroyer and only its leader Dienson and two of his men remained. Despite this, all ran for the northern targets. Reaching the northern winding station (*253*), Purdon smashed open the door and set charges much as Smalley had, and then waited for Brett and Burtenshaw to complete their work on the caisson (*256*) itself. Brett was wounded early on, but continued to advise the others. The commandos laid underwater charges against the face of the caisson by hanging them from a railing along the north side. But fire had picked up and a number (including Burtenshaw) were killed. Retreating, Sergeant Carr fired the charges and the caisson was damaged, but not destroyed. Purdon fired his charges, and together the remaining commandos retreated toward the bridge Roy held over the Old Entrance.

The destruction of the dockyard machinery was so complete that, even if the *Campbeltown* charge failed, the Normandie dock would be completely unusable for at least a full year. But reaching the bridge, the commandos found the bridge under fire and could only be crossed with great risk. Newman's headquarters was on the other side. Under

fire, all crossed to meet with him and inquire about evacuation. It was only then that they became aware of the carnage on the river.

After the *Campbeltown* had rammed the caisson, the MLs began to come up—the port column headed for the Old Mole (*336*) and the starboard column making for the Old Entrance (*366*). Shortly after the destroyer had rammed, Curtis' MGB moved into the confined spaces of the Old Entrance. In this enclosed area, Ryder was unaware of the fate of the little boats.

The MLs began to take heavy fire even before the destroyer ended her voyage on the Southern Caisson. And it began to tell immediately, with boat after boat being hit repeatedly. ML 192, the lead boat of the starboard column commanded by Stephens, never reached the Mole and was abandoned aflame with casualties aboard. Burt's boat overshot the Old Entrance, came about, and put his commandos ashore. Rodier's boat, third in line, was already there. But fire was heavy, and Morgan's and Woodcock's groups reembarked, asking to be put ashore on the downstream side. Total confusion now reigned. Lt. Beart's ML 267 also overshot the Old Entrance, came about, landed the commandos, reembarked them when the fire was found too intense, and then savaged by fire before it could withdraw. Burning, it too was abandoned.

ML 268 was the first boat in the column to make the Old Entrance approach as planned, but came under accurate fire and exploded astern of the *Campbeltown*. Fenton, in the fifth boat of the group, managed to avoid the drifting and burning vessels of his compatriots and made the Old Entrance, there landing Hooper's assault party. But now, with severe damage to the engines, he tried to withdraw. Being one of the four torpedo boats, he attempted to torpedo the *Sperrbrecher*, but after one run abandoned the attempt and withdrew to the open sea. Rodier, likewise, gained the Old Entrance despite the holocaust to land Haines' party. He then tied to the *Campbeltown*, taking off the naval personnel and retraced his course through the German fire to the open sea.

The other spare ML, under Lt. Nock, found its way to the Old Entrance, arriving in time to witness the destruction on the river at its height. He spent some time engaging enemy guns with the Oerlikons, but could locate no survivors to evacuate. Withdrawing, his ML 298 was badly hit, both engines exploded, and the boat was abandoned. Meanwhile, Burt's boat had come upon Collier's craft, which had been badly shot up. Moving to offer assistance, he was waved off by Collier—alone on the bridge and mortally wounded. But the pause had been fatal, and Burt's ML was heavily hit, engines and steering knocked out. Burt ordered all aboard to abandon ship.

(There is little the player can do about the German fire pouring into the naval force but pray and deal with developments as best can. The covering fire can help, but will rarely do much damage against the guns and searchlights. The British force is simply outgunned from the start, and is firing from fragile floating platforms against fortified gun emplacements. The Avant Port can be used to hide from the worst of the enemy fire while waiting to pick up the surviving commandos, but even here only if the guns protecting it—*311, 312, 411, 434A, 434B*—are silenced.)

The port column of launches was having almost as much trouble as the other, although more of these boats would eventually escape. Their landing zone, the Old Mole, remained in enemy hands throughout the night and the searchlight at its end, like the blockhouse in the middle, would remain in action. The action here was so furious that the final landing attempt was over only fifteen minutes after the destroyer had struck the caisson.

First came ML 270, but her steering was KO'ed by a direct hit and her captain, Lt. Irwin, decided he had to withdraw rather than be an easy target; she made the open sea. Lt. Platt, next in line, carrying the commandos under Birney who were to secure the Mole, apparently grounded short of the steps and came under fire from German infantry above. Trying a second approach, the boat was hit numerous times, caught fire, and drifted away burning. This brought up ML 160 under Lt. Boyd. Carrying no troops, he made himself a nuisance to the Germans along the waterfront, giving supporting fire everywhere, attempting to torpedo the *Sperrbrecher*, and eventually expended all his ammunition engaging enemy gun positions at close range. He picked up the survivors of Platt's boat and even stopped in the holocaust a second time to pick up three commandos in the water. Despite repeated hits, the boat was charmed and retired through a cascade of shells from shore batteries to the open sea.

Next in line came the aforementioned Collier, at the helm of ML 457, carrying two four-man demolition parties under Pritchard and Walton and the protection squad under Lt. Watson. Avoiding the burning boats, Collier landed his passengers, and the returned to midstream to await them—a fatal mistake. Repeatedly hit, his boat was set aflame. After refusing Burt's rescue attempt, the ML exploded taking Collier and eight of his crew with it.

Of the other four launches in the port column, none were able to land their troops due to the heavy fire. Wallis, after one attempt, abandoned the landing and took his boat to the opposite shore to engage enemy gun positions there. Horlock overshot the mole, then with casualties mounting, simply found the fire too thick to make another attempt. Henderson took his ML 268 to both the Old Mole and the Old Entrance, but was unable to land at either and turned for home. Falconar took on various survivors from the water, losing all his guns to enemy fire in the process, and wisely retreated back to the open sea.

Ryder left his position at the Old Entrance around 2:30 after seeing Wynn's torpedoes fired against the lock gates (*212*). As Curtis brought his MGB out into the river, Ryder got his first look at the slaughter. The wrecks of five launches were still burning, and he witnessed Collier being savaged as he made his second run at the Old Mole. Ryder ordered Curtis to go to his aid. MGB 314 sailed to within 250 yards of the mole, promptly silenced the dangerous German gun in the bunker (*336*), and also engaged the searchlight at the end (*342*) and a second enemy gun inshore (*344*). With the boat now receiving numerous hits, Ryder determined to return to the Old Entrance to tell Newman there would be no boats to withdraw the commandos. But he found a firefight raging at the shore there, and no other craft afloat. Ryder ordered Curtis to retreat.

Of the commandos in the motor launches, few made it ashore—Newman's HQ, Haines' group, the three groups from Collier's boat and one man from Stephens'. The initial plan had been for the second destroyer to land these troops, and the destruction of the small boats after the German inability to seriously damage the *Campbeltown* proved the accuracy of the planners' predictions. With the ineffective bombing raid having insured that all the German positions were manned, even the few commandos ashore here had little hope of doing further damage. Newman had landed at 1:40 and shortly less than an hour later issued orders recalling his men. Cut off from their transport home, they would have to fight their way through the Old Town and across what came to be known to the commandos as the "Bridge of Memories" (*343*) into the new town, and from there hope to reach neutral Spain. (As it turned out, only five were able to complete this path and return to England; the rest either died

at St. Nazaire or became POWs the next morning.)

German reinforcements were closing in around the Old Entrance and the British now numbered less than 100 men, most of them wounded. There was no time to waste, so Newman and Copeland organized their forces into 20-man groups and moved out through the streets. Reaching the bridge they found it held by German infantry; in fact, these were some of the last naval troops around. The commandos charged the bridge and broke through. The breakout continued for another hundred yards or so, when they suddenly ran into the leading elements of the mobilized and approaching 679th Infantry Brigade. These troops were backed up by armored cars, and Newman's groups broke up into small parties. The action was over—almost.

THE AFTERMATH

Most tried to hide. And most were routed out by the thorough German search procedures. As the commandos were captured they were brought together in a cafe for processing. The main concern among the British, needless-to-say, was whether they were far enough away from the *Campbeltown*.

As the search had been mounted, other Germans gathered at the Southern Caisson to view the great curiosity of a British destroyer perched atop the dock gate. A quick search of the ship had been undertaken but had failed to uncover the explosives. Shortly after 10:30 AM, with somewhere in the neighborhood of 100 Germans, dockyard workers and souvenir hunters aboard, the *Campbeltown* fuse ran out and detonated the charges. The caisson was blown off its track, and the inrush of water forced it back against the inner wall of the dock. The two tankers in the dock, the *Passat* and the *Schledstadt*, were carried along on the tidal wave into the inner face of the Northern Caisson. The remainder of the *Campbeltown* was carried into the dock and sank to the floor.

The blast was a tremendous shock to the Germans, and it raised tensions considerably. Shots were still being heard that night as nervous Germans fired at shadows, Frenchmen, and occasionally each other. By Sunday morning, things had calmed—only to be again unhinged by the detonation of Wynn's delayed-action torpedoes at the lock gates at 4:00 AM. The Germans were angered, and as they had rounded up the last of the commandos the day before, suspected local sabotage. When a second torpedo exploded an hour later, the reaction was severe as German officers felt a civilian rising was in the offering. In various incidences, some 16 Frenchmen were killed and 26 wounded.

As for the surviving British boats, Rodier's was disabled and abandoned about three miles downstream. The survivors of it (including Beattie but not Rodier) were picked up by a German patrol boat. Wynn's gallant little craft was destroyed by shore guns when he stopped to rescue survivors and some 30 men took to a raft thrown overboard. Only three (including Wynn) were still left alive in the cold waters when German patrols found them at 2:00 PM. Henderson's ML 306 ran afoul of one of the German torpedo boats. He fought an uneven battle for an hour, but was finally forced to surrender with 20 of his 26 men aboard dead or wounded.

MGB 314, Irwin's ML 270, Fenton's ML 156 and Flaconar's ML 446 all kept their rendezvous with the British destroyers and started for home. But the pace was too slow for the wounded, and with German aircraft about, the survivors were transferred and the small boats were scuttled. Two other destroyers, the *Cleveland* and the *Brockelsbury*, were ordered out from England, and they made contact about mid-morning. Three other MLs missed the rendezvous and made for home on their own. Horlock's ML 443, Wallis' ML 307, and Boyd's ML 160 were also entertained by the Luftwaffe but survived intact and even accounted for a He111 that ventured too close.

The St. Nazaire raid proved to be an important watershed in the course of World War 2. It was the first large-scale landing by Allied troops against Hitler's Europe, and it helped tip the strategic scales in the Battle of the Atlantic. Hitler had already withdrawn significant elements of the fleet back to German waters the previous month, largely due to growing pressure from the RAF. Destruction of the Normandie dock insured they would not return, and that the *Tirpitz* would not be risked.

It also had a profound psychological effect on all concerned. Besides rattling the German command tremendously, it had a positive effect on French morale as well. The British counted the raid a success, despite the appalling losses, and managed to reap a considerable store of experience and information on seaborne landings. The Americans were dramatically shown that their new allies intended not to wait passively for their salvation. The British handed out an astonishing number of decorations—another gauge of the importance they placed on the mission. Five Victoria Crosses (more than for any other single action except the defense of Roake's Drift) and 68 other awards were shared among the new "600".

But the French mayor of St. Nazaire perhaps summed it up the best when he addressed returning survivors after the war for a reunion. "You were the first to give us hope."

THE SIMULATION

RAID ON ST. NAZAIRE is a bloody game—especially if played with the historical scenario depicting the abortive air raid diversion. The alerted Germans will often chew the MLs to pieces. The commandos from the *Campbeltown* are usually the player's best hope for Victory Points, since they are the best placed to actually land. You must use them to gather as many points as possible on their side of the port, as quickly as possible. On land, speed and the dispatch of the first Germans to appear is critical. If your assault groups are not aggressive enough, the demolition teams will be unable to penetrate the port in any depth and the enemy will rapidly increase in numbers. The first hour is the time for the British to execute their missions; after that, the Germans will hold the initiative as you fight to withdraw.

The Old Mole is the best place from which to reembark with the shortest route out of the harbor. Land withdrawal is far more difficult, since the commandos will have to wade through the entering reinforcements in order to get free of the town. And you can't blow the bridge at *343* until the last minute, as it will be needed for a landward break. Some few groups might even be evacuated from the relative safety of Avant Port, although the Forced Landing rules make this difficult. In short, there is no easy path back to England.

We would hope that this game has given its players some appreciation of the realities of commando operations. At the very least, we would hope that it is challenging and fun to play. If we have accomplished that much, we've succeeded. Good luck.

☆

A TRAVEL GUIDE TO ST. NAZAIRE

Your Very First Raid

By Bob Proctor

One of the things I dislike most is to find out that I've been playing a game incorrectly. Do you know the feeling? It happened to me most recently playing *RAID ON ST. NAZAIRE*; I read the rules carefully (I thought) and then went through them again as I played my first game. Things went fine, but as the game progressed and I dove back into the rulebook to clear up certain questions, I began to discover that I hadn't been counting movement costs correctly, that I had allowed guns to fire that weren't supposed to, that German units that should have appeared automatically hadn't, and a few other things. It's my own fault. It's a solitaire game; who else can I blame? I should have read the rules more carefully. Maybe the old attic is getting too full and every time I push something in the front, something else falls out the back? I can't believe it's *all* due to senility, however. Surely there must be a way to help us learn, and use, the correct rules on the first playing of a game?

In the case of *RSN*, the rulebook is pretty complete, but does not present rules in quite the right order to "play as you read". A full-blown tutorial would help, but it would be at least as long as the rulebook and there is not enough space for such in The *GENERAL*. Instead, I offer here a detailed "Turn Sequence" for *RAID ON ST. NAZAIRE* which should make it possible for the reader to start playing as soon as he gets the game home from the store. It is intended to be complete enough, and general enough, that those of you who do not have the game should even be able to follow the Series Replay in this issue. I have not tried to replace the rulebook and I refer to the appropriate sections to avoid repeating minor details.

Counters and Map

Before we get into the actual Turn Sequence, we must review those aspects of the game that will be unfamiliar to those who have not yet played this excellent solitaire game.

Look at the counter sheet first. About two-thirds of the counters are combat "units". Some units represent infantry and these are called "commandos" if they're British and "Stosstruppen" if they're German. Other units represent a major weapon—a vessel, a gun, a searchlight, or armored car—and the crew which operate it. The destroyer *Campbeltown* has two counters, one for each half of the ship. (I left them joined together to make a distinctive counter one inch long for this most important "boat".) Note that all British vessels are called "boats" regardless of size and German vessels are called "ships". Boats have counters; ships are printed on the mapboard. Searchlights are a bit unusual in that they have one counter for the light itself, and one for the beam. The beam counter is used to indicate where the light is currently shining.

The map is gorgeous, isn't it? It uses "areas" and "zones" instead of the familiar hexagons and there are two different systems of movement—one for water and one for land. Boats move in the seven water zones. The harbor is divided into five zones labelled "A", "B", "C", "D" and "Z"; the smaller two zones on the left—"Approach" and "Open Sea"—play minor roles. On land, the areas are much smaller and are identified by three-digit numbers. The numbers are set inside a symbol that indicates whether this area is open ground (circle), a building (square), a ship (triangle) or part of the U-boat pens complex (hexagon). The areas are con-

nected by solid lines to show where movement is allowed and by dashed lines to show where movement is not possible but combat is (across water, for instance). Areas are grouped together into four zones: areas 111 to 166 are Zone "1", 201-266 are Zone "2", 301-366 are Zone "3" and 401-494 are Zone "4". Gray boxes on the mapboard are Zones "5" and "6" which represent offboard German assembly areas.

There are some dice-rolling terms which are used in the rulebook (and in this issue of The *GENERAL*) for brevity. Some will be familiar; some are unique to *RSN*. For the uninitiate, a "dr" is the roll of one die which gives a result of from "1" to "6"; a "DR" is the roll of two dice where they are added together for a result from "2" to "12". A "drm" is a modifier for a dr or DR a value added or subtracted to the number actually thrown.

In *ST. NAZAIRE*, a "Selection DR" is the roll of two dice as well, but it is read as a two-digit number in the range "11" to "66". The convention is to throw a white and a colored die and to read the colored die first. In the game, such rolls are primarily used to select one of the British boats as a target. A "Triad" is a roll of three dice. Read the red die as a dr, and the yellow plus the white as a DR. One will tell the player whether a hit has been made, and the other what the damage is to be. All are thrown together to save time. A "Selection Triad" is read as a three-digit number (red, yellow, white) in the range "111" to "666" and is usually used to select a land area on the map.

Setting Up the Game

Set-Up is very quick and simple. Place the German guns and searchlights on the board in their assigned positions (shown on each counter). None of the Stosstruppen start on the map, but they get sorted into six groups prior to play. They have a number from "1" to "5" in the upper right corner of each counter which indicates the alarm level at which they may be activated; sort them into piles according to their alarm level. Those with no alarm level are "replacement" counters for use when a unit loses strength or combines, and they make a sixth pile. The pile with alarm level "1" will be the first to react; put them into a container (hereafter known as the "cup") from which they can be drawn at random. The defense is ready.

Place all the British boats in the Approach Zone. The commandos start the game as passengers on the boats, so they are not on the map until they land. The "Game Log" shows which commando is on which boat and what their assigned targets and landing areas are to be; it is also used to record losses and victory points. (Players can change the printed information regarding boats and passengers and their targets within certain limits—5.1—but for the first game it's easiest to use the historical assignments.) You're ready to go!

1.0 Gun/Searchlight Phase

1.1 Restoration: The very first thing you must do each turn is roll for any German gun or searchlight that may have "Disruption" or "Out of Action" markers on them. Of course, there won't be any the very first turn of the game. When you do need to do this, roll two dice (a DR) for each gun or light. There are no drms and a roll of "2-7" causes something to happen. If the unit was disrupted, then a "2-7" roll restores the unit to action immediately.

If the unit was "Out of Action", then the marker is either removed ("2" or "3") or flipped to the "Disrupted" side of the counter ("4-7"). Don't worry about remembering this because it's printed on the counter for you.

1.2 Illumination: On the first turn of the game, the searchlight activity is preprogrammed. The light at 412 illuminates the Approach Zone; place its beam counter there with the yellow (−1 To Hit drm) side up. The light at 342 also illuminates the Approaches, but its beam counter is not placed there until the Covering Fire Phase.

Starting on Turn 2, you must make a dr for each functioning searchlight to determine which zone it will illuminate. There are no drms. Each light has three possible "zones of effect" and these are shown on the right-hand side of the counter (the rules call this the "Illumination Code"). A dr of "1-3" means the light will hit its primary zone, which is the top of the three. A roll of "4" or "5" illuminates the secondary zone and a roll of "6" illuminates the tertiary (bottom listed) zone.

If there are less than six boats or commando counters in a zone, there is a chance that a light may be ineffective. If the beam counter ends up in such a zone, a dr is made and if the number on the die is *greater* than the number of British units, then flip the counter to its gray (0 To Hit drm) side. It will have no effect for this turn, but the light is still functioning and can be shot at by the British.

2.0 Naval Attack Phase

2.1 Predesignated Harbor Defense Fire: First the defense gets one automatic hit on any target that is too big or too bright to miss. There is no To Hit dr since no misses are possible. Just roll two dice for the effect and refer to the Harbor Defense Table. There are no drms for this. Roll first for the *Campbeltown* (until it is abandoned by its crew or sunk), then once for each boat that is "On Fire" (including the destroyer if she's ablaze). Boats that are in Zone Z or the Open Sea are immune to both predesignated and normal Harbor Defensive Fire.

Mark the results with appropriate "Evade", "On Fire", "Turn Away", "Dead in Water" or "Sunk" counters and record gun, crew and commando losses on the Game Log (as explained in Rule 7.1). Note that when a commando loses one or more boxes, you must also check for ammo losses (according to Rule 11.8).

2.2 Harbor Defensive Fire: Now the normal defensive fire is resolved and it becomes possible for the Germans to miss. The player makes rolls until a miss occurs or until 12 hits are made (not counting any hits from predesignated fire). Use the "Shots Taken" marker on the turn record track to count the hits.

For each shot, throw all three dice. The red die determines if a hit has occurred and the other two dice determine which boat is being shot at. A "6" on the red die is a miss (after Turn 3, a "5" or a "6" is a miss), but there may be modifiers that change a miss into a hit! There is a −1 drm if the boat is on fire or dead in the water. Searchlight illumination can also be a −1 drm; if there is a beam counter with its yellow side up in the same zone as the target boat, and if its drm makes the difference between a miss and a hit, then place that beam counter directly on top of the target boat counter and apply the drm. This boat is considered "caught in the beam" for the remainder of this turn; the

light's −1 drm is applied to any subsequent shots against this boat but cannot be applied for combat against any other British unit. If there are two or more beams in the same zone they cannot be used against the same target, but otherwise all drm are cumulative.

The yellow and white dice of the triad are a selection DR to determine which boat is hit. As there are 36 possible numbers and 18 British boats, each boat has a pair of numbers assigned (shown on the counter and the Game Log). For example, if the yellow die is a "4" and the white a "1", then the selection is "41". Boyd's boat is "41-42" and so would be hit. If the boat which is indicated has been sunk or is not in the Approaches, Zones A, B, C or D (the zones where Harbor Defensive Fire is allowed), then find instead the boat with the nearest selection number that is available. Once you have figured out which boat is the target and that there is a hit, another DR gives the effect on that boat.

2.3 Covering Fire: Now the British boats get to shoot back at searchlight or gun positions. They also shoot until a miss occurs, and there is an effective limit of six shots. Each shot is a triad where the yellow and white dice total is the To Hit DR and the red die gives the effect. The To Hit total must be "7" or less to get a hit and a +1 drm is added for every hit scored this turn. This has the effect of making "2-7" a hit on the first shot, "2-6" a hit on the second, "2-5" on the third, and so on. If you manage to score six hits, then the +6 drm makes any further hits impossible. There are also To Hit drms based on the "Flotilla Gun Display" on the Game Log. This shows the total number of guns in the flotilla at the moment; losses among your boats are reflected by marking off the appropriate hits on your guns (if a boat sinks, then all its guns are crossed off). For example, after eight boxes have been crossed off, a +1 drm is added to all British Covering Fire To Hit rolls.

You must choose the intended target for each shot before the dice are rolled, and the following rules govern your choice of targets:

1. Targets cannot be "Disrupted" or "Out of Action" (if they aren't active, they would be invisible in the dark).

2. You must have a boat with a functioning gun in one of the three zones the target could affect.

2.4 Dockside Defensive Fire: Harbor Defensive Fire represents the general effect of offboard German guns; now the guns onboard get their turn. This is resolved one sea zone at a time, in any order. It is applied to the Approach zone on the first turn only. Each gun may fire at only one zone and must fire at the highest zone of effect in which there are target boats. Flip each gun unit as it is allocated to show that it has been used for Dockside Defensive Fire. Note that a gun may not engage in such fire if there is a commando unit ashore in the same area or an adjacent area (Rule 11.4).

This fire is resolved by a triad in the same manner as Harbor Defensive Fire with the To Hit number equal to the number of German guns firing at the zone. So, if the guns at 300A, 300B and 312 fire into Zone A, a roll of "1-3" on the red die would be a hit (with no drm). If a hit is scored, the yellow and white dice are used to select the target boat as with Harbor Defensive Fire. If the boat with the selection number is not present in that zone, select the boat that is present with the nearest number—a hit is a hit in this game. Resolve damage in the same manner as before. Once a miss occurs, there is no more fire in this zone for this turn. When the Dockside Defensive Fire is completed, flip all the gun counters back to their normal side.

2.5 Open Sea Encounters: There won't be any of these on the first turn. Later, boats have to pass through the Open Sea to return to England and as

they do, they run the risk of being interecepted by alerted German forces. Make a DR for each boat in this area on the Open Sea Encounter Table as described in section 7.4.

3.0 Naval Move Phase

3.1 Movement: Is your morale about to break under the withering fire from shore? Finally a chance to get moving! Each boat's maximum speed is shown in the lower right corner of its counter. Most have a maximum of "2" movement factors (read 2MF), but a few can go as fast as 4MF. However, since the British were approaching at reduced speed to avoid alerting the defenders, no boat may move more than two on the first two turns.

Let's consider Turn 1. It takes 1MF to move into an adjacent sea zone, so boats with only 1MF (due to damage or evasive maneuvers) can only move to Zone A from the Approaches this turn. Those with 2MF could move through A to Zone B or Zone Z. One thing you might want to attempt is sinking the *Sperrbrecher*. This ship is anchored out in the harbor so that its two guns could be used for defense; sinking it early will prevent those two guns aboard from doing more damage on Turn 2. The player can attack it with any torpedo boat except MTB 74 (Wynn)—which has delayed action torpedoes. Choose one that has 2MF left after Naval Combat and move it into Zone A (1MF); now use the second MF to make a torpedo attack (Rule 8.4) on the flak ship. The attack is not resolved until after all naval movement is completed, and only a dr of "1" or "2" sinks it, so you could improve your chances by making another attack with another torpedo boat.

Landings should commence on Turn 2. A boat expends 1MF to enter or leave a Landing Area. Area 336 is the easiest to reach; it is adjacent to Zone B so that boats that start there with at least 1MF can make a landing. Boats in Zone A with 2MF can also reach it. Even though the boat is placed directly on Area 336 (or close alongside if things get crowded, there is no limit to stacking), it is still considered to be in Zone B for German naval fire.

Another event that should happen on Turn 2 is the *Campbeltown* ramming the Southern Caisson of the Normandie drydock. Only the destroyer may do this and it costs 1MF. Thus, if *Campbeltown* can maintain a speed of 2MF, she can move into Zones A and B on the first turn and on Turn 2 can move into C and ram the caisson. Read Rule 8.2 for details of how its guns may fire after ramming and how the crew can scuttle the destroyer to improve the odds of getting the 12 Victory Points (VP) for destroying the caisson.

There are two other movement rules which you can look up only when needed. It takes 1MF (per boat) to pick up/transfer passengers from another boat in the same zone (Rule 8.3). As survivors are worth VP if you can get them to England, this is a decision to be made. And, starting on Turn 5, a boat may attempt a Forced Landing in an area not designated for landing (Rule 8.5). This takes all of a boat's MF for that turn and succeeds only on a dr of "1" or "2" (no drm are applied).

3.2 Torpedo Attacks: Resolve all torpedo attacks in any order you wish with a dr on the Torpedo Attack Table (−1 drm if the target is already "Damaged"). Mark off the torpedo box for that boat on the Game Log. Note that Wynn has delayed action torpedoes (see 8.42) which are not resolved until the end of the game. Mark off Wynn's torpedo when he attacks, however.

3.3 Clear Markers: Remove all "Evade", "Turn Away" and "Sunk" markers from all British boats. Remove any boats that were sunk and delete them from the Game Log.

3.4 German Ship Withdrawal: This is a rule you won't use until Turn 10. Beginning then, the German ships moored around the basin move to the

U-boat pens for protection. Read Rule 13.2 when the time comes.

4.0 Loading/Unloading Phase

4.1 Load/Unload Commandos: All boats in a Landing area may unload or load passengers. To unload, simply place the commando counter on the area; there are no stacking limits to worry about. To load, remove any commando counters that are in the area and mark off a number of passenger boxes on the boat to match the current strength of the unit(s) being loaded. Note that all boats have a limit of 12 passenger boxes.

5.0 German Activation Phase

5.1 Activation Number: It's time to see how the Germans react. There is a drm for each turn printed on the Turn Record Chart on the mapboard. This starts out at −3 but gradually becomes positive; thus, more and more Germans enter the fray as the game progresses. Roll a DR to see how many German units will be activated this game turn.

5.2 Select Units: Draw that number of units randomly from the cup holding the available forces. If the Activation Number is "12" or more, then the first unit is automatically an armored car (Rule 9.5). If all of the units in the cup are taken, add the next group of counters you sorted before play began. In other words, if you took the last unit labelled Alarm 1, then put all the Alarm 2 counters into the cup and keep drawing. When the fifth group has been used, add all the German casualties from groups 3-5 to the cup. You should always have German counters available to place.

5.3 Place Units: Roll a triad for each unit activated and place the unit in the area indicated. If the area contains a gun or searchlight that is "Disrupted" or "Out of Action", the light/gun is restored and the activated German unit is reduced in strength (Rule 9.4). If the area determined is untenable, then return the counter to the cup. Untenable areas are those where one or more of the following conditions apply: it is occupied by British commandos; it is a German ship that has withdrawn; it is an overwater area (bridge, ship or lock gate) that has been destroyed; it is an area from which it is not possible (due to demolitions) to *ever* reach a commando.

6.0 Land Movement Phase

6.1 Commandos Move: Commandos move from area to area along the solid lines, paying movement costs as they go (Rule 10.1). If two areas are connected by a single solid line then the cost is 1MF; two lines cost 2MF; three lines, 3MF. Commandos have 3MF at full strength and 2MF at reduced strength, but they have 1MF less on the turn that they land (Rule 10.3). Remember that it costs 1MF to enter or leave an area containing any enemy unit (including guns and lights) and German units are activated automatically when a commando unit moves onto a ship (Rule 13.21) or adjacent to the U-boat pens (Rule 14.2).

6.2 Set German Movement Number: The Stosstruppen's mobility varies randomly from turn to turn. Roll a die (no drm) for the Move Number for this turn and mark it on the track provided on the mapboard. The MF of each German unit will be in the range of 0MF to 3MF, depending on their current strength (10.2). Larger units will be more mobile than smaller ones.

6.3 German Units Move: Stosstruppen take the shortest route towards the nearest commando as detailed in Rule 10.4. They follow the same rules as commandos, except that they cannot leave an area containing a commando unit and German units on ships and in the sub pens are restricted (Rules 13.1 and 14.2). Armored Cars can move 4MF no matter what the movement dr.

7.0 Land Combat Phase

7.1 Resolve Commando Attacks: Commandos can engage in Fire Attacks against a specific enemy unit in their own area or in any connecting area. All combat "in the same area" must be resolved before any fire between areas is resolved. Resolve combat by making a DR where the colored die is a To Hit dr and the white die is the number of enemy strength points lost. Several To Hit drm may apply depending on defensive terrain and whether the commando is a demolition unit (those with the orange stripe on the counter) or an assault unit (Rule 11.3). German losses are taken immediately by replacing the target counter with an appropriate one of lower value.

Assault commandos may instead make a "grenade attack". Grenade attacks can only be made against units in the same area. Such attacks use one ammo box on the Game Log and are the *only* way to destroy armored cars (Rule 11.3). They can, if successful, eliminate all German Stosstrupp units in an area except in the U-boat pens (Rule 14.2). Grenade attacks can be made against guns and lights, but affect only the target (11.4 and 11.6).

7.2 Resolve Stosstruppen Attacks: Surviving German units fire back following the priorities laid out in Rule 11.31 for targets of their fire. This fire is conducted and resolved the same as British fire attacks, except that British losses are recorded on the Game Log. When a commando loses one or more strength points, you must also check for ammo losses (Rule 11.8). If a commando unit's strength is reduced to three or less, its counter is flipped over to the 2MF side.

7.3 German Long Range Fire: Any guns in Flak Towers which have not yet participated in a Fire Attack this turn may shoot at commandos in any area which is color-coded to match the gun's area

(Rule 11.51). A dr of "1" or "2" is a hit (−1 drm if the target is illuminated) and a hit removes one strength point on the top commando unit in the target area. Check ammo loss for each hit.

7.4 British Mortar Attacks: Assault units (only) may return the long-range fire with mortars (11.52). They must be in an area subject to German long-range fire and the target is always the gun which can shoot into that area. A dr of "1" is a hit; resolve hits with a dr on the Covering Fire Table.

8.0 Demolition Phase

8.1 Preparation: British demolition units (with ammo) that are in an area with a VP objective, a gun or a searchlight may try to blow it up. If the target is a VP objective, a preparation dr must be made first. Roll a die (drm for attacks made, movement, and presence of enemy units); if the result is less than or equal to the current strength of the commando unit, place a "Prepared Charges" counter in the area. If successful, mark off an ammo box for that demolition unit on the Game Log.

8.2 German Removal: Any Stosstruppen unit that is in an area with a "Prepared Charges" marker and no commando units may attempt to remove the charges. Roll a DR and if the result is less than or equal to the unit's current strength, the charges are removed (and the counter).

8.3 Demoliton Resolution: For every "Prepared Charges" counter in an area with a commando unit, roll a die on the Demolition Attack Table (drms per Rule 12.3). Note that an assault unit can detonate the charges, but with a +1 drm. A result of "1-3" destroys the target; a "4" damages it. Mark the target area with the appropriate counter. A result of "5-6" means no effect. In all cases, remove the "Prepared Charges".

9.0 Consolidation Phase

9.1 Combine German Stosstruppen: For each area in which there are two or more Stosstruppen counters and no commandos, replace two German units with a replacement counter equivalent to their combined strength (Rule 10.6).

9.2 Move Turn Marker

10.0 End of Game

10.1 Resolve Detonation of Campbeltown: After all commandos have been eliminated or evacuated, the explosives in the *Campbeltown* detonate. Make a dr on the Demolition Attack Table to see if the South Caisson is destroyed. There are a number of special drm for this attack. First, the normal +1 for the South Caisson does not apply. There is a −1 drm if the *Campbeltown* rammed at speed 2MF, and another −1 drm if she has been scuttled (*not* sunk). If the maximum −2 drm applies, only a roll of "6" will fail to destroy the caisson.

10.2 Resolve Detonation of Delayed Action Torpedoes: If MTB 74 made a torpedo attack during the game, resolve this now with a dr on the Torpedo Attack table.

10.3 Count Victory Points: Add up all the VP for targets destroyed, half value for targets damaged, and any additional points for survivors that reach England (Rule 15.2). How'd you do? So far my best has been 86.8 points and my worst has been 16.2! (This last disaster occurred when six boats, including the *Campbeltown* were sunk by Turn 2 and the rest pulled out.) But, the amazing thing about *RAID ON ST. NAZAIRE* is that we, unlike the British who rode into history on the small boats, can try again. Good luck.

☆

CONTEST 140

It is the British Movement Phase late in a game of *RAID ON ST. NAZAIRE* and although you have sealed off the Old Town from the Western Reinforcement Zone by blowing the southern bridges and lock gates, a pitched battle in the north has been lost and Stosstruppen are pouring across the Northern Swing Bridge and Northern Caisson. Bradley, the last unharmed Demolition unit, is attempting to blow the Lock Gates at 212 and thus seal off the Old Town from the Northern Reinforcement Zones, but has been unable to Prepare Charges yet. Your last remaining forces with any chance to assist Bradley are Haines, Newman and Hodgson. Haines and Newman have taken casualties, but each still has three MF and an ammo. Hodgson, on the other hand, has been reduced to two MF and has no ammo. All of the German flak towers are still active, but the Searchlights have all been eliminated. Your task is to make the next move for these three Assault units in such a manner that will give Bradley the best chance to destroy the Lock Gates.

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Ten winning entries will receive merchandise from The Avalon Hill Game Company. To be valid, an entry must include a numerical rating for this issue as a whole and a listing of the three best articles in the judgment of the contestant. The solution to Contest 140 will appear in Vol. 24, No. 5 and the list of winners in Vol. 24, No. 6 of The *GENERAL*.
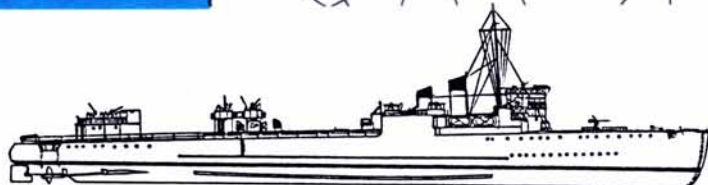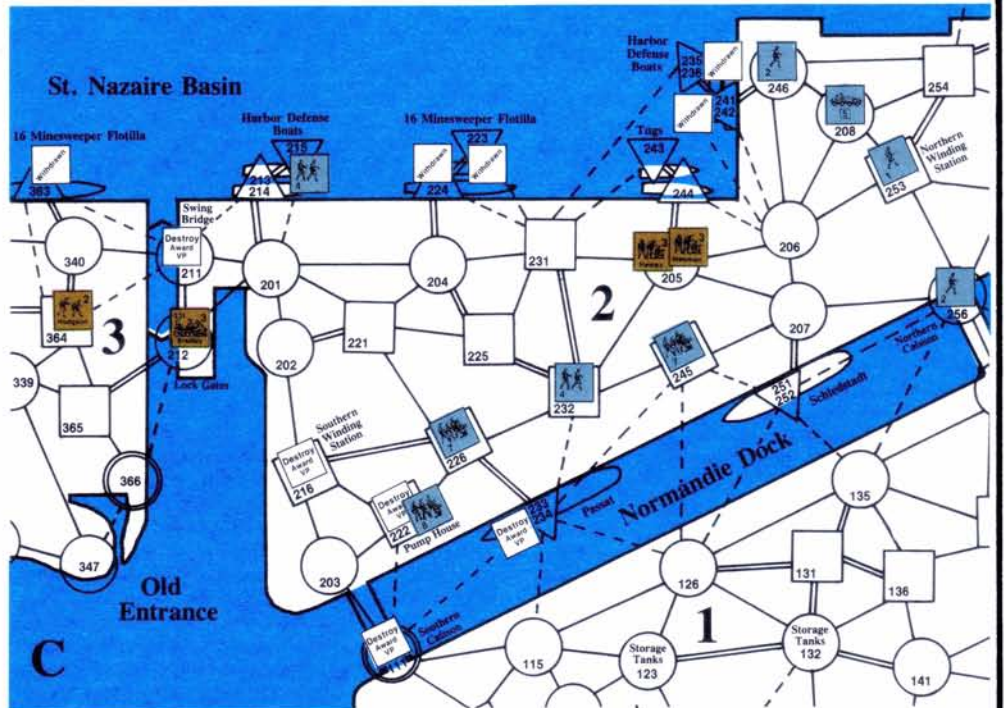
RUNNING THE GAUNTLET
The Royal Navy in RAID ON ST. NAZAIRE
By Eric Noreen

Introduction

This article is based on what I have learned from playing 81,000 games of *RAID ON ST. NAZAIRE*. Okay, I exaggerate somewhat. *I* didn't actually play 81,000 complete games from start to finish. However, I was able to simulate on a computer virtually all of the naval aspects of the game. From those simulations, I believe you will have a better idea of what to expect in *RAID ON ST. NAZAIRE* and will pick up some hints on how to better play the game.

There are two distinct phases in this game. The first, or the naval phase, consists of transporting commandos by naval vessels to their Landing Zones and attacking selected installations with torpedoes and naval gunfire. The second, or land phase, consists of those commandos attacking specified shore installations such as bridges and drydock machinery in the midst of mobilizing German infantry. While there are a few links between the naval and land phases of the game, to a large extent they can be considered independently. This article is concerned with naval operations; land operations are considered herein only to the extent that they affect the naval aspects of the game.

At first, it would appear that the Royal Navy can win the game with very little help from the commandos. The Southern Caisson, once rammed by the destroyer *Campbeltown*, can usually be blown up for 12 Victory Points. The torpedo boats are capable of destroying the two seaward Lock Gates for four Victory Points each and the floating battery *Sperrbrecher* for another one. And two-tenths of a Victory Point is awarded for each of the 226 crew and commando sections successfully evacuated back to Britain. Therefore, in principle, the Royal Navy could accumulate 66 VP ($12 + 2 \times 4 + 1 + .2 \times 226$) on its own out of the 70 required to win. Commandos could pick up the remaining victory points by blowing a few installations.

It is important to recognize that virtually all of the demolition targets are initially unprotected but that, as time passes, more and more German infantry organize themselves into effective units that pose a threat to demolition squads. Furthermore, any delay in landing commandos needlessly exposes them to risk from German guns firing at their naval transports. This argues for quickly landing the commandos.

Therefore, at first glance, the mission of the Royal Navy in *RAID ON ST. NAZAIRE* is clear: suppress shore batteries with naval gunfire, ram the Southern Caisson with the DD *Campbeltown*, land as many commandos as possible as quickly as possible, torpedo the Lock Gates, pick up commandos after they have blown a few targets, and then return to Britain.

If you have played through *RSN* a couple of times, you probably realize that the above description of the Royal Navy's mission is wildly optimistic. Unfortunately, German shore batteries and emplaced guns turn the St. Nazaire channel into a devastating turkey shoot. This article is intended to indicate reasonable expectations for the course of naval operations and to explore some options that are available for minimizing losses. These objectives are accomplished by means of a computer simulation which, except in a few minor respects, faithfully reproduces all aspects of naval operations for a game. To give some idea of the complexity of the computer program, it consists of over 1100 BASIC statements (many of which must be executed

numerous times in a game). Even so, all the naval operations can be performed in several seconds on a personal computer rather than in hours as would be required in an actual game. This makes it possible to test out various tactics in thousands of games.

The ability to play thousands of games is particularly important with *RSN* because most tactical choices involve subtle tradeoffs; it is difficult to tell in advance whether a particular tactic will help or hurt on balance. The only way to tell whether a tactic will be beneficial is to try it out in games. However, due to dramatic changes in the character of the raid from game to game as a consequence of die rolls, it is virtually impossible to ascertain the net effect of a particular tactic by playing only a few games. One cannot tell whether a good outcome was due to luck or whether it was due to superior tactics.

Fortunately, it *is* possible to simulate the naval aspects of the game on a computer because there are a small number of decisions that need to be made and, by and large, those decisions can be made before the game even begins. Indeed, perhaps the most important decisions concerning naval operations *must* be prespecified. The rules require that the destroyer *Campbeltown* proceed with all speed to ram the Southern Caisson and that the Landing Zones for commandos must all be specified before the game begins.

The Computer Simulation

The elements of the Sequence of Play that pertain to naval actions are fully reproduced in the simulation, except that "Open Sea Encounters" are omitted. In the interests of simplicity, I made several decisions up front that might be different in an actual game as it progresses. In some respects, these simplifications may make the game more realistic. Like nearly all wargames, *RAID ON ST. NAZAIRE* assumes the commander has far more information and control in the heat of the battle than is probably realistic. The simplifications I have made can be viewed as a part of the operational orders that are issued to commanders *before* the raid commences. In the chaos of the raid itself, it is unlikely that the flotilla commander could successfully communicate major changes in plans to boat commanders and have them executed.

The simplifications I have made are listed below:

1. *Boats do not pick up passengers.* In principle, crew and commandos from stricken boats can be picked up at a cost of one movement factor. Those who are rescued serve no function on the rescuing boat, but earn Victory Points if the rescuing boat makes port in England. However, the loss of a movement factor can well determine the difference between a successful mission for a boat or disaster. In the simulation, I have ordered all boat captains to accomplish their primary objective and return to Britain without stopping to pick up passengers. While this seems inhumane, few boats manage to make it safely home anyway. Attempting to pick up survivors would most likely simply add to the litter at the bottom of the St. Nazaire channel. For the same reason, boat commanders are not to tarry to evacuate commandos.

2. *Targets of covering fire.* Royal Navy gunfire can knock out German guns and searchlights temporarily or permanently. I ordered flotilla commanders to first aim for the gun on the Old Mole (336) which

threatens ships and commandos landing at the Old Mole—and then for guns in 344, 311, 312, 300A and 300B.

3. *Wynn's boat.* The torpedo boat commanded by Wynn carries no commandos but does carry a delayed-action torpedo which may explode at the end of the game. Wynn was ordered to attack the Old Entrance Floating Gate. This target was selected since surviving *Campbeltown* commandos need some over-the-water escape route into the Old Town. Instead of blowing up the Old Entrance Floating Gate immediately, it can be preserved as a bridge to the end of the game if attacked with the delayed action torpedo.

4. *Nock's boat.* Nock's boat carries no commandos and, contrary to what is printed on the log, it carries no torpedoes. I ordered Nock to proceed directly to Sea Area D and to remain there one turn, after which he can make for the Open Sea. Nock can serve a useful purpose in Sea Area D by drawing Dockside Defensive Fire away from other boats. (German guns whose primary coverage is Sea Area D will then fire on Nock rather than at boats in the Old Entrance area.)

5. *No forced landings.* Forced landings can be carried out in an area other than the boat's planned landing zone (336 on the Old Mole or 366 at the mouth of the Old Entrance) after the 0152 turn on a die roll of "1" or "2". However, very few, if any, boats with commandos are typically afloat and mobile after the 0152 turn. In the interests of simplifying the program, I ruled out forced landings. Boats were required at all costs to land their commandos in their planned landing zones.

6. *Interface with land operations.* German guns which are successfully assaulted by commandos cannot fire at vessels. However, there are no Victory Points for taking out a gun and assaulting a gun places the commando at risk from return fire if the assault does not succeed.

The *Campbeltown* commandos more or less have to attack the guns on the Pump House (222) in order to meet their demolition objectives. In the simulation, I ordered the *Campbeltown* commandos, once ashore, to take up positions to fire at the Pump House guns, attempting to put them out of action. If the commandos are unsuccessful, the guns fire back. In the turn following the landing, surviving commandos move directly to the Pump House and attack the guns with grenades, while demolition commandos provide supporting fire from adjacent areas. On the following turn, the commandos withdraw. In an actual game, a player might choose not to withdraw at that point. However, by following the plan I have suggested, the simulations give a pretty good idea of how successful the initial assaults on the Pump House guns are likely to be. The steps involved in assaulting the Pump House guns I have outlined above were simulated precisely as they would occur in a game.

Commandos who land at the Old Mole are subject to fire from guns in 336 and 344 on the turn in which they land. To simplify matters, in the simulations I assumed that demolition teams, if unburdened with wounded, would proceed directly to 335. No more than two assault teams would remain in area 336; other assault teams would also move to area 335. The two most effective commandos in area 335 are then used to attempt to suppress guns 336 and 344, with gun 344 being given

the higher priority. The assault teams in 336, if any, then attack that area's gun with grenades. If the guns are still functioning after these attacks, they fire at the commandos. On the second turn ashore, I had all surviving commandos move inland toward VP targets and out of range of guns 336 and 344.

Choosing a Plan of Operations

Given the above assumptions, four remaining choices had to be made, and those choices defined my operational plans. The choices pertained to the following aspects of the game:

1. *Planned Landing Zones.* If the default Landing Zones are selected, six boats are detailed to land commandos at the Old Mole (336) and seven at the Old Entrance (366). However, a player can designate either landing zone for any boat before the game begins. The Old Mole is the closer of the two landing sites and hence a successful landing is more likely in this area. Furthermore, if all the commandos are landed on the Old Mole, the guns located there can be overwhelmed at lower risk to the commandos. However, there are beneficial aspects to sending the boats the extra distance to the Old Entrance. First, some commados can be landed closer to their primary targets. Second, boats that enter the Old Entrance Sea Zone draw Dockside Defensive Fire away from the *Campbeltown* if it is on fire and this may make the difference between a successful and an unsuccessful raid. Since the net effects of switching landing zones is not obvious, I tried out several combinations. In each operational plan I specified that all of the boats transporting commandos would use either: a) the default planned landing zones; or b) the Old Mole landing zone; or c) the Old Entrance landing zone.

2. *Objectives of the torpedo boats.* Each torpedo boat can launch one torpedo attack in a game against the floating gun platform *Sperrbrecher* or one of the two lock gates (212 or 313). In a torpedo attack, a die roll of "3-4" damages the target and a die roll of "1-2" (or "3" if previously damaged) destroys the target. If destroyed, the floating gates are worth four Victory Points each. There is only one Victory Point for sinking the *Sperrbrecher*, so there is some question whether it should be attacked by torpedoes. On the other hand, the *Sperrbrecher* does carry two guns that menace passage into and out of the St. Nazaire channel. On the other hand, a torpedo launched against the flak ship cannot be launched against a 4-point target.

The torpedo boats commanded by Irwin and Boyd carry no commandos. Hence, they have two possible missions: launching torpedo attacks and drawing German fire away from other vessels. Whether or not the *Sperrbrecher* is designated as the primary target for torpedo attack, each of these boats should be assigned one of the two gates as a target. When they are assigned to the Avant Port gate, they also draw Dockside Defensive Fire away from boats in Sea Zone A. When they are assigned to the Old Entrance lock, they draw fire away from other boats in Zone C. This latter aspect is particularly important if the *Campbeltown* is on fire and has just limped into Zone C and must spend a turn there before ramming the Southern Caisson. Again, since the net effects are not obvious, I tried out various combinations of torpedo boat objectives in the simulations. In each operational plan I specified either that: a) both boats would attack the Avant Port lock; or b) Irwin would attack the Old Entrance gate and Boyd the Avant Port gate; or c) both boats would attack the Old Entrance lock. (Irwin provides the most effective screening for the *Campbeltown* since it is "closest" to the destroyer when DR selections are made to take hits.)

There is the additional question of the conditions under which the torpedo boats should be released to return to England. At most, a boat that does not

carry passengers is worth only 1.2 Victory Points if it manages the return voyage to safety. By simply drawing German fire away from boats that carry commandos, Irwin and Boyd can serve an important function. Accordingly, when a torpedo boat expended its last torpedo on the *Sperrbrecher*, it was nevertheless ordered to its secondary target to carry out a feint attack.

3. *Dealing with the Sperrbrecher.* The boats commanded by Fenton and Rodier carry both commandos and a torpedo. After landing their commandos, these boats were ordered to attack the floating gate at the Old Entrance. However, if an attack on the *Sperrbrecher* had been ordered but Irwn and Boyd had failed to sink it, Fenton and Rodier might be ordered to torpedo the *Sperrbrecher* before landing their commandos. There are arguments on both sides of this issue. On the one hand, taking out the *Sperrbrecher* would reduce the number of German guns that harass the flotilla. On the other hand, the delay to launch torpedoes might easily result in disaster for Fenton and Rodier and their commandos aboard. In each operational plan, I specified either that: a) no attack would be made on the *Sperrbrecher*; or b) Irwin and Boyd would attack the *Sperrbrecher* alone; or c) Fenton and Rodier would assist Irwin and Boyd, if need be, in the attack on the *Sperrbrecher*.

4. *"C" losses inflicted on crew or commandos?* The *Campbeltown* rams the Southern Caisson unless it is sunk, and the only way it can be sunk is by loss of all its crew sections. Crew sections are automatically lost whenever there is an "MC" or "KO" damage die roll on a *Campbeltown* hit. In addition, at the option of the player, "C" losses can be taken from either the crew or the commandos on a boat. While electing to take "C" losses from commandos rather than from crew usually won't make the difference between sinking or a successful landing, occasionally it does. The cost, of course, is weaker commando units. In each operational plan I specified either that whenever possible: a) "C" losses be taken from crew; or b) "C" losses be taken from commandos on the *Campbeltown* and from crew on all other boats; or c) "C" losses be taken from commandos on all vessels. ("C" losses are never taken from the crew if doing so would sink the vessel.)

The Results

An operational plan specifies the choices that were made concerning the planned landing zones, the objectives of the torpedo boats, tactics for dealing with the *Sperrbrecher*, and whether "C" losses would be taken from the crew or the commandos aboard. Since there are three alternatives for each of these four choices, there are 81 (3x3x3x3) different operational plans in my model. Each of these operational plans was used in 1000 different games.

The single most important outcome from an operational plan is the frequency with which the *Campbeltown* succeeded in ramming the caisson. If the *Campbeltown* is sunk and therefore cannot ram the Southern Caisson, the raid might as well be scrubbed. Therefore, to evaluate the success of the operational plans, I focused on the frequency with which the destroyer rammed the caisson and, *given that the Campbeltown did ram the Southern Caisson,* the average number of commandos landed, and the average Victory Points won. I computed the latter two statistics only for those games in which the DD did ram the caisson since that is a precondition for a successful raid. (Note that even if the *Campbeltown* does ram the caisson, its demolition charges might fail; even so, I included all games in which the Southern Caisson was rammed in the set of games that might lead to a victory for the British and for which statistics were computed.) The Victory Points are for crew sections returned to Britain (since I assume that all boats that make it

to the Open Sea make it safely back to Britain), the *Sperrbrecher*, the floating gates destroyed by torpedoes, and destruction of the Southern Caisson. The commandos landed are net of any losses at sea and any losses ashore due to fire from the Pump House guns or the Old Mole guns (336 and 344).

As it turned out, the operational plans had very little effect on the average Victory Points, which ranged from a low of 13.6 to a high of 16.9 across all 81 operational plans. (Remember these averages were computed for only those games in which the *Campbeltown* rammed the Southern Caisson; across *all* games, the averages would be lower.) This differential of approximately three VP is not large enough to dictate the frequency of operational plans.

The operational plan had more of an impact on the frequency of successful rammings and on the average number of commando sections landed. The frequency with which the destroyer successfully rammed the Southern Caisson ranged from a low of 66% to a high of 79% across all 81 operational plans. In those games in which the *Campbeltowń* did make it to the Southern Caisson, the average number of commando sections landed ranged from a low of 60.8 to a high of 72.0. While these differences across operational plans are not dramatic, they are large enough to be noticeable.

It would be convenient if a single operational plan yielded both the highest frequency of successful rammings *and* the largest number of commando sections landed. Unfortunately, that did not happen. To a large extent, in *RAID ON ST. NAZAIRE* you don't get something for nothing. The frequency of ramming usually can only be increased at the cost of decreasing the number of commando sections that make it onto the shore. Measures that increase the survivability of commandos (i.e., switching their landing zone to the Old Mole) often also increase the vulnerability of the *Campbeltown*. This tradeoff between the two objectives is graphically illustrated in Figure 1.

Figure 1: The Trade-Off between the Frequency of Successful Rammings by the DD *Campbeltown* and the Number of Commandos Landed. Each point on this plot represents the average result across 1000 games for a single operational plan.
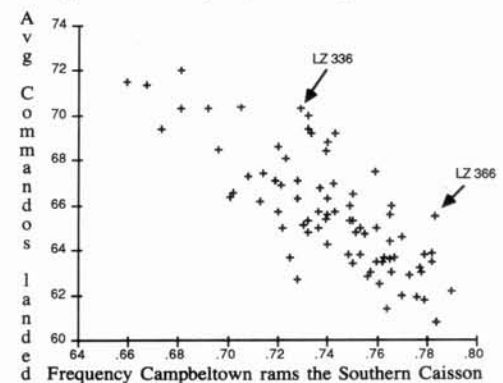
A plan that dominates all others would appear in the upper right-hand corner of Figure 1. As you can see, there is no such dominating plan. However, most players would probably choose either the operational plan I have labelled "LZ336" or plan "LZ366" which do stand out somewhat from the others. It is possible to find a plan that yields more successful rammings than LZ366, but only at the cost of fewer commandos ashore. It is also possible to find a plan that yields more commandos than LZ336, but only at the cost of fewer successful rammings by the *Campbeltown*.

These two operational plans are very similar. In both plans, all torpedo boats (including Fenton and Rodier) are ordered to sink the *Sperrbrecher*; "C" losses are taken from commandos on the *Campbeltown* and from crews on other boats; and both Boyd

and Nock are assigned to attack the Avant Port lock. However, the planned landing zones are different for the two operational plans. The planned landing zone for plan LZ336 is the Old Mole; the planned landing for LZ366 is the Old Entrance area 366. Landing in 336 rather than 366 brings the landing zone closer to the boats' starting position and hence more commandos make it ashore. On the other hand, the boats do not draw Dockside Defensive Fire away from the *Campbeltown* in Zone C in those instances in which the destroyer is limping toward the Southern Caisson. So the effects of shifting all boats from one landing zone to the other are off-setting shifts in the probability of ramming and in the average number of commandos landed.

Taking plan LZ336 first, the DD *Campbeltown* successfully rammed the caisson in 72.9% of the 1000 games in which the particular plan was used. In the other 27.1% of the games, the raid was called off and the game was considered lost. The remaining statistics in the top section of Table 1 are for ·729 games in which the *Campbeltown* rammed the Southern Caisson and there was some prospect of a successful raid. Many of these statistics are gloomy and may come as a shock to all but the most experienced *ST. NAZAIRE* players. An average of slightly under five boats make it to the Open Sea after accomplishing their missions. And these ships are manned by an average of only 18.5 total crew sections. That's less than four Victory Points for evacuees! What is more, these ships haven't made it back to England yet. They still have to run the perils of attack at sea from the Luftwaffe and Kriegsmarine, which I did not simulate.

The statistics for commandos landed look more encouraging. At the start of the game, there are a total of 19 units with six sections each. Of the 19 unts, an average of 14.2 make it to shore. However, note that this statistic refers to only the games in which the *Campbeltown* rammed the caisson and so landed its six commando units. Hence, an average of only 8.2 of the 13 units that are not on the destroyer make it into action. And, among the commandos who make it to shore, there has been an average of 17% attrition due to "MC" and "C" damage hits and losses to gunfire from shore.

Figure 2: The Results of Operational Plan LX336. Relative Frequency of Number of Commando Units landed for Games in Which the *Campbeltown* successfully Rammed the S____

Entrance lock gate, which is assigned to three of the torpedo boats (including Wynn), is destroyed in 54% of the games. (This discrepancy is due to the amount of fire Nock and Boyd draw upon themselves when they enter the Avant Port zone and to the fact that they are more likely to have expended their torpedoes on the *Sperrbrecher* than Fenton or Rodier.)

Each game was played until all ships were either sunk, dead in the water, or in the Open Sea. This required an average of seven game turns (42 minutes in the scale of the game) and ranged from a low of four turns to a high of eleven. It is sobering to realize that in just 40 minutes the bulk of the flotilla is usually reduced to burning hulks and flotsam.

It is interesting to note the high degree of variability in the games. The number of commando units that make it to shore, given that the *Campbeltown* has rammed the caisson, varies all the way from six to 19 units. The relative frequencies for plan LZ336 are displayed in Figure 2. While the average *is* 14.2 units landed, just about anything could happen in any particular game. *RAID ON ST. NAZAIRE* is not a solitaire game that can be played once or twice and then forgotten because it holds no surprises. Every game is likely to be quite different from the last one that was played.

Statistical analysis of the results for all 81 plans revealed the magnitudes involved in some of the tradeoffs. On average across all operational plans, if the torpedo boats are ordered to bypass the *Sperrbrecher*, the frequency of successful rammings increases by about 2% and the number of commandos landed decreases by about two sections. The frequency of successful ramming increases because, if the torpedo boats bypass the *Sperrbrecher*, they are more likely to be in a Sea Zone in which they will draw Dockside Defensive Fire away from the destroyer.

If "C" losses are taken against the crew on the *Campbeltown* rather than against the commandos, the frequency of successful rammings decreases by about 4%, while the upside revelation is that a little more than two commando sections on average are saved to fight on land. If "C" losses on the other boats are taken against the commandos, the net effect is a decrease of about two and a half commando sections ashore. The direct losses to the commandos apparently outweigh the additional losses due to sinkings.

If the default landing zones are used instead of the Old Mole landing zone, there is an increase of about 3% in the frequency of successful rammings, but the cost is an average loss of about three and a half commando sections.

In summary, while the computer simulations did not unlock the key to success in *RAID ON ST. NAZAIRE*, they did provide insights into the extent of the carnage that can be expected in a typical game. The simulations also appear to support certain tactical choices and to provide indications of the tradeoffs involved in some of those choices. Now, when you must face these decisions, at least you will be better informed of the consequences.

Table 1

The Results of Operational Plan LZ 336

Frequency the Campbeltown successfully rammed the Southern Caisson in 1,000 games: 72.9%

Statistics concerning the 729 games in which the Campbeltown successfully rammed:

	mean	max	min	std dev
functional ships in the Open Sea	4.7	14	0	2.9
crew on board functional ships in the Open Sea	18.5	67	0	12.8
commando units landed	14.2	19	6	2.4
total commandos landed	70.3	107	18	15.5
total covering fire hits	2.3	10	0	1.6
German guns destroyed	4.0	8	1	1.3
number of turns in the Naval game	7.0	11	4	1.1

	frequency
Sperrbrecher sunk	73%

SERIES REPLAY
RAID ON ST. NAZAIRE

British: Don Greenwood
Neutral Commentary: Rex A. Martin

This marks something of an unusual event in our series of replays—the playing and analysis of a solitaire game. Of course, RAID ON ST. NAZAIRE is a most unusual solitaire game. It challenges the player to better the exploits of the British combined force in that famous action. As the reader will see, and hopefully come to appreciate, the solitaire system devised to handle the German (your "opponent") reacts with an intelligence and purposefulness rarely found in solitaire games. It demands a mixture of skill and luck to defeat that shadowy figure sitting opposite. Don Greenwood, the game's developer and a fine player in his own right, takes up the challenge.

0128

HARBOR DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
—	—	—	Campbeltown*	10/MC [crew: 3, Roderick: 3]
1	5	466	Wynn	7/Evade, MC [crew:1]
2	5	223	Falconar	8/Evade, C [crew]
3	5	421	Platt	9/Evade
4	5	462	Rodier	2/Sinking
5	5	343	Stephens	6/Turn Away, KO
6	6	644	Stephens**	4/Fire, KO
7	5	255	Fenton	7/Evade, MC [crew: 2, Hooper: 1, ammo]
8	5	266	Wynn	9/Evade [Turn Away]
9	5	212	Campbeltown	9/—
10	5	641	Boyd	MISS

* Predesignated target; no To Hit DR necessary
** Caught in Searchlight; −1 TH drm

COVERING FIRE

Shot #	DRM	Triad	Target	Effect
1	0	443	336	Disrupt
2	+1	266	342	MISS

Gun 336 is my first target because it has the potential of wreaking the most havoc. Historically, this was the position that stymied the landings at the Old Mole. If functioning when the troops hit shore, it can do great damage. Having disrupted it, I hope it stays that way long enough for my commandos to get ashore and eliminate it. Despite its importance, I couldn't afford a second shot at it now. My second target was the 342 searchlight which will be effective in the upcoming Dockside Defensive Fire Phase.

DOCKSIDE DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	5	342	Boyd	6/Turn Away, KO
2	5	534	Horlock	8/Evade, C [crew]
3	5	354	Tillie	7/Evade, MC [crew: 1, Pennington: 1]
4	5	215	Irwin	7/Evade, MC [crew: 3]
5	6*	644	Stephens	5/—, MC [crew: 2, Burn: 2, ammo]
6	6**	623	Falconar	10/MC [crew: 3, Hodgson: 2, ammo]
7	5	653	Tillie	MISS

* target hit because it was on fire
** target caught in Searchlight 412

NAVAL MOVEMENT PHASE

To B: Campbeltown, Ryder, Collier, Wallis, Henderson, Burt, Beart

Remaining boats stay in the Approach Zone while Nock picks up six survivors from Rodier and Irwin picks up six from Stephens.

The German fire either sank (Rodier), Turned Away (Boyd), or forced to Evade (Irwin and Fenton) all four of my TMLs. Therefore, I am unable to attack the *Sperrbrecher* this turn. That being the case, it seemed pointless to venture into Zone A this turn with my seven remaining boats capable of doing so as such a move just leaves them open to more devastating Dockside Defensive Fire. Hopefully, my three remaining TMLs will be able to enter Zone A next turn and torpedo the Sperrbrecher. Nock, with neither troops to land nor torpedoes to fire, stays behind to rescue survivors; but as he doesn't want to carry them all, Irwin helps out. Stephens, with his movement halved and on fire, had little chance of landing his commandos. I usually abandon any boat that is on fire; they draw too much attention to survive and their presence can actually turn a Phase-ending Miss into a hit.

GERMAN ACTIVATION PHASE

A dice roll of 6 activates three Stosstrupp units: "2" in 433, "4" in 654, and a "2" in 354.

END OF TURN: 0 Victory Points

As usual, British losses begin to mount from the very beginning. Rodier's and Stephens' boats are in trouble after the German Harbor Defensive Fire. By the end of the turn, the commando groups of Haines and Burns are already gone. At this point in the game, the player's decisions are rather limited. I can't fault Don's choice of targets for his covering fire. I will only call attention to his decision not to commit his boats to the killing field in A, and to his decision to use Nock to evacuate survivors. Both are eminently logical, as discretion is the better part of valor. It is too bad that none of his TMLs got into range this turn to fire torpedoes, since they are nicely used to also evacuate survivors once these are spent and might help pick up a few more points for returning to England with passengers. Losses among the British are about average—so far.

0134

GUN/SEARCHLIGHT RESTORATION/ILUMINATION PHASE

Unit	DR/(dr)	Zone Illuminated	Effect
336	7	—	Restored
342	(5)	A	ineffective
142	(4)	C	ineffective
412	(3)	Z	ineffective

HARBOR DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
—	—	—	Campbeltown*	4/Fire, KO
—	—	—	Campbeltown*	6/—, KO
1	5	554	Tillie	4/Fire, KO
2	6	453	Tillie	10/MC [crew: 2, Pennington: 1, Dead-in-Water]
3	5	132	Wallis	7/Evade, MC [crew: 3, Bradley: 3, ammo]
4	5	636	Henderson	MISS

* Destroyer is Pre-Designated target—no To Hit DR necessary

COVERING FIRE

Shot #	DRM	Triad	Target	Effect
1	+1	211	336	MISS

DOCKSIDE DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	5	145	Burt	6/Turn Away, KO
2	5	545	Burt	7/—, MC [crew: 2, Woodcock: 1]
3	6*	312	Campbeltown	4/—, KO
4	5	534	Henderson	12/C
5	5	214	Ryder	10/MC [crew: 1, Newman: 1]
6	5	345	Burt	9/—
7	5	113	Ryder	9/Evade
8	6*	211	Campbeltown	10/MC [crew:3, Brett: 2, ammo]
9	5	152	Beart	9/Evade
10	5	132	Wallis	3/Fire, MC [crew: 3, Bradley: 2, sinking]
11	5	425	Collier	7/Evade MC [crew: 2, Walton: 2]
12	5	551	Beart	4/Fire, KO

* TH# is increased due to fire on board.

NAVAL MOVEMENT PHASE

Campbeltown rams caisson at Speed 2

To C: Ryder

To B: Horlock, Burt, Platt, Falconar, Boyd, Fenton, Wynn, Beart

Landing at 336: Collier, Henderson (after evacuating 1 from Wallis)

To A: Irwin (torpedoes and sinks Sperrbrecher)

Approach: Nock (evacuates 6 from Tillie and moves to Near Approach)

Phew! A real pasting—had to hold my breath—one more crew casualty to the *Campbeltown* and she would have sunk before reaching the Caisson. As it is, about the only good thing than can be said for this turn is that Irwin polished off the German AA ship on the first shot and Nock is in position to take an early powder with a full load of survivors. It's hard to be optimistic about scoring Victory Points for survivors on Turn 2! Boyd moves into B to help dilute Dockside Defensive Fire away from the troop-carrying boats and to back up Wynn's efforts against the Lock Gates at 212.

Streaming flames, with most of the crew dead or dying at their stations, the Campbeltown gallantly crashes into the caisson. Actually, the losses Don took are serious. Chances are that he will never take the chance to scuttle the destroyer. One of his valuable demolition parties is shot up, losing a charge in the process, aboard Wallis' boat; and then is lost forever. Another disappears into the maelstrom in the harbor. So Don is already down two assault parties and two demolition parties before he ever gets ashore. In return, his own covering fire has been ineffective. Only his shot on the flak ship brings him any luck—first in avoiding hits on his TMLs and then a 33% roll to sink it.

GERMAN ACTIVATION PHASE

An "8" dice roll activates five Stosstrupp units: "2" in 414, "4" in 662, "2" in 121, "2" in 225, and a "2" in 345.

LAND MOVEMENT PHASE

BRITISH: Roy (6), *Smalley* (6) to 216; Roderick (3), *Purdon* (6) to 203; *Chant* (6), *Brett* (4) to 111; Swayne (6), *Walton* (4) to 336. [All demolition units are listed in *italics*. The current strength of British units is listed in parentheses.]

I don't envy Swayne and Walton the task of taking out restored Gun 336 without Assault troops, but they have little choice. If they were to run, they could only reach 335 where they would be subject

to fire from 344 and 336 anyway. Although the survivors could then head toward their targets, I'm inclined to stay and try to knock out Gun 336 to help the lads in the remaining boats. The move from the Southern Caisson is made to maximize the number of attacks against the two guns in the Pump House. The old adage about the best defense being a good offense is especially true in this game.

GERMAN: The Movement die roll is a "2". "2"/121 to 116, two "4's"/641 to 155; "2"/225 to 221.

LAND COMBAT PHASE

Attacker	Target	TH #	TH dr	DR/Effect
Swayne (6)	336	6	—	4/—
Walton (4)	336	4	5	
Roy (6)	222A	6	—	2/—
Roderick (3)	222A	3	1	2/—
Chant (6)	222A	4	5	
Brett (4)	222A	2	4	
Purdon (6)	222A	4	4	5/Disrupts Gun
Smalley (6)	222B	4	1	4/—
222B	Roderick	5	5	5/Eliminates unit
336	Swayne	6	—	4/Eliminates 4, ammo
344	Walton	4	2	2/Eliminates 2, ammo

DEMOLITION PHASE

Smalley (6) prepares his charges in the Southern Winding Station, but his attack has no effect and the charges are now at risk.

END OF TURN: 1 Victory Point

Two "4" in 155 consolidate into a "6" and a "2".

I don't necessarily agree that Swayne and Walton had little choice about landing. Certainly, staying at sea is dangerous; but coming ashore without protecting parties against a couple of guns is sure to garner casualties among demolition troops. On the other hand, if they had managed to eliminate or silence the gun, dividends would have been obvious for those still to land at the Mole. But, this is the first crucial decision that Don has to make—a definite gamble, but that's the "name" of this game.

Meanwhile, the rush against the Pump House guns has become almost standard play for those who survive the wild ride of the Campbeltown. It's what happens afterward in this region that decides if the player has a chance at victory. Note how Don put Roderick on top of Purdon to absorb casualties. This highlights the need for support for Swayne and Walton before they go ashore.

0140

GUN/SEARCHLIGHT RESTORATION/ ILLUMINATION PHASE

Unit	DR/(dr)	Zone Illuminated	Effect
222A	7	—	Restored
432	(3)	4	ineffective
412	(1)	Z	ineffective
342	(5)	A	Effective
142	(3)	D	ineffective

HARBOR DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
—	—	—	Campbeltown	5/—,MC [Sinking]
—	—	—	Beart	9/Evade
1	5	521	Platt	5/Turn Away, MC [crew: 1, speed]
2	6*	212	Campbeltown	4—
3	6**	615	Irwin	7/Evade, MC [crew:1]
4	5	644	Burt	MISS

* TH# increased due to fire on board.
** TH# increased due to being caught in SL 342.

COVERING FIRE

Shot #	DRM	Triad	Target	Effect
1	+2*	113	336	Gun destroyed
2	+3	664	222B	MISS

* Flotilla has been reduced to 23 Gun Factors.

Figure 1: The situation near the Pump House immediately prior to the Land Combat Phase of 0140.

DOCKSIDE DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	4*	1—	Irwin	5/Turn Away, MC [crew: 1, speed]
2	4*	1—	Irwin	6/—, KO [Sinking, Passengers: 3]
1	3	4—	Ryder	MISS

* Caught in Searchlight; only possible target in Zone A.

Things could have been worse. At least the commandos have kept three guns (344, 222A & B) too busy to add to the mayhem in Dockside Defensive Fire. Having no guns drawing down on Zone B is a big plus. Knocking out Gun 336 with Covering Fire is a Godsend. Now Swayne and Walton may survive to reach their targets.

Actually, I'm not sure how they could be worse— short of the Campbeltown sinking on the run in (in which case, I concede victory to the German and set up the game again). Many of his small boats are in dire straits and his commandos have been badly shot up already. Most importantly, the destroyer has not been scuttled; and getting a scuttled Campbeltown against the Caisson is the single most important thing you can do toward victory in this game. As is, the lack of this die roll modifier often marks the difference between victory and defeat.

NAVAL MOVEMENT PHASE

Landing at 366: Ryder, Burt, Fenton
Landing at 336: Falconar, Horlock
To B: Beart, Platt, Wynn (after entering C and torpedoing 212), Henderson, Collier
To Z: Boyd
To Open Sea: Nock

After firing his delayed-action torpedoes at Lock Gate 212, Wynn returns to B at high speed to dilute fire aimed at Platt and Beart who are still trying to land their troops. Collier and Henderson, unable to reach Irwin in time to take off his passengers, remain in Zone B for the same reason. Nock is at full capacity so he heads home. This leaves only Boyd to save Irwin's passengers, but he still has a torpedo to deliver against the Lock Gates in 313 and that, regretfully, must take precedence. By venturing alone into the Avant Port, Boyd also fills another task performed last turn by Irwin—that of sacrifi-

cial lamb—drawing the fire of several guns (311 and 312) which otherwise could be brought to bear on Platt and Beart. Normally I evacuate any boat on fire, but Beart is otherwise in relatively good shape and the need for his troops ashore is great so we'll try to gut it out against the reduced shore defenses.

GERMAN ACTIVATION PHASE

An Activation dice roll of 10 brings on six German units: "2" at 563, "6" at 362, "6" at 454, "4" at 361, "6" at 533, and a "4" at 465.

LAND MOVEMENT PHASE

BRITISH: Hodgson (4) to 335, *Wilson* (6) to 335, *Swayne* (2) to 326, *Walton* (2) to 334, Hooper (5) to 364, *Woodcock* (5) to 365, Newman (5) to 364, Roy (6) to 222, *Smalley* (6) in 216, *Purdon* (6) to 226, *Chant* (6) to 222, Brett (4) to 216.

I'd like to take out SL 342 but Swayne and Walton have been shot up too badly to tangle with any more Germans. Although it is important to knock out the Power Station as soon as possible to shut down the searchlights, I need Wilson as a backup for Hodgson's grenade attack on Gun position 344. This is a highly debatable gamble. With only two MF remaining after landing, Hodgson is unable to enter 344 for a grenade attack on the gun. Discretion would probably be the better part of valor here! A smarter move might have been to bypass this Gun position entirely and move on into 344, but that would be leaving Moss and Birney to their fate at sea. With my high losses to date and the continuing resistance of the guns at the Pump House threatening a disaster over there, I need every commando ashore. So I'm gambling here in an effort to help them land.

Over at the Old Entrance, Hooper and Newman are setting a trap for Jerry in 364. With any luck, the "6" in 362 will blunder with the "4" in 361 into 364 where we can polish them both off with grenade attacks. Woodcock remains behind to add a third shot should the "6" only reach 339 or our grenade attacks go badly.

Everything hangs in the balance at the Pump House. If our attack fails to take out those guns this time, there may not be enough of us left to attempt it next time. This move maximizes our attack poten-
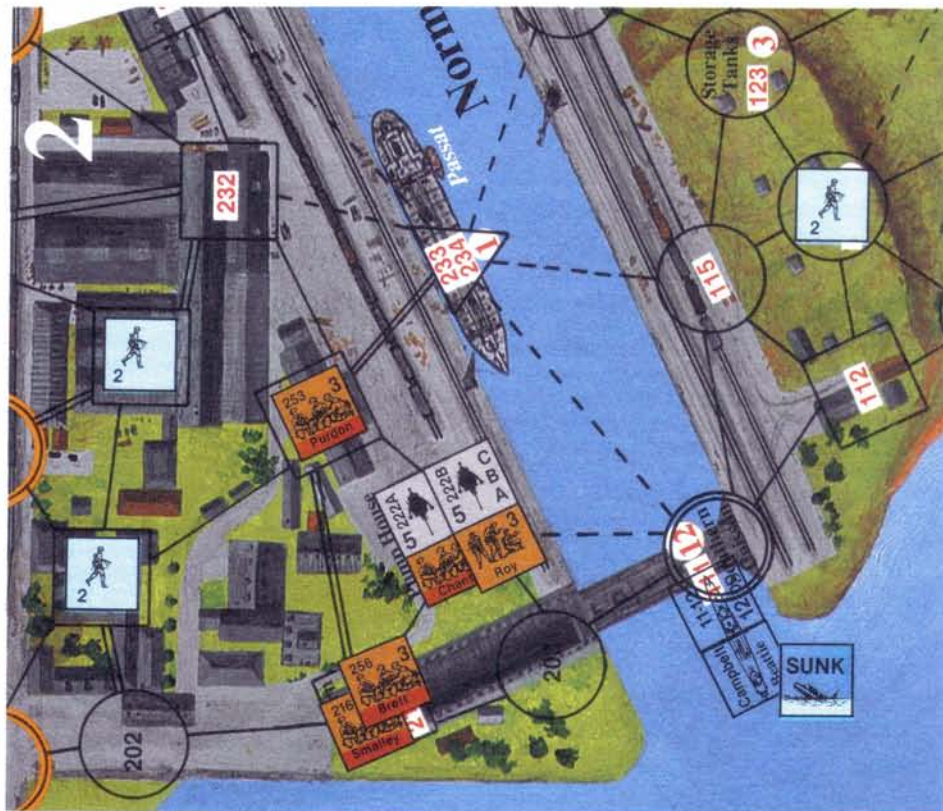
tial against the guns while also moving to better defensive terrain. Brett and Purdon are not moved to the Pump House because such a move deprives me of two shots versus those guns. While the guns do not have to be taken out to blow the target, their presence detracts from the Preparing Charge die roll, and I can ill afford a continuing exchange with those guns while trying to get my charges in place on the machinery.

My first real disagreement with Don on his operations comes with the action around the Pump House. He has already mentioned the pros and cons of taking on the gun at 344, but I think he gives short shrift to his other crucial decision this turn. The guns in the Pump House are secondary; once the target itself is destroyed, you can usually avoid fire from them by moving away. With Smalley ready to take out the Winding Station, I'd go for the quick double strike. And that means insuring that Chant is not fired on and does not fire. Thus, besides stacking Roy above Chant in 222, why not add Brett as well? He can better spare a charge than Chant, and will leave Chant to concentrate on destroying the target—not non-VP guns. If it works, then all three units can move away next turn, with Chant ready to operate against further targets or supply firepower to protect other demolition parties carrying out their primary operations. Instead, as readers will see, Chant is tied up for yet another turn just when every moment counts—before German resistance begins to gel. Of course, if it doesn't work, Chant will have to stick around—with an increased likelihood of company from the Germans. But, if willing to gamble in one spot, why not here as well?

GERMAN: The Movement die roll is a "3". "6"/511 to 408, "6"/454 to 461, "4"/465 to 492, "6"/362 to 364, "6"/155 to 207, "4"/361 to 364.

German units are going to make getting to the Northern Caisson rather tough unless die rolls tie them up with low movement allowances. In any case, as is obvious, every turn here may be crucial. Don needs to get moving against the targets at the north end of the Normandie Dock. And other large German units have appeared near the 261 Swing Bridge and between the Old Mole and the Old Entrance. Don only has Roy, Newman and Hooper to expend in challenging them, with Moss and Birney still at sea.

LAND COMBAT PHASE

Attacker	Target	TH #	TH dr	DR/Effect
Hodgson (4)	344	4	3	1/—
Wilson (6)	344	5	6	
Newman (5)	364	3	3	Grenades eliminate 10
Roy (6)	222A	3	2	Grenades eliminate Gun
Chant (6)	222B	5	2	4/—
Brett (4)	222B	2	1	6/Gun Out of Action
Purdon (6)	221	4	1	3/eliminates 2
Gun 344	Hodgson	4	4	4/eliminates Hodgson

Two out of three isn't bad I suppose, unless you're in a boat trying to land on the Old Mole. The Old Town forces now have no Assault troops to tackle the defenses on the Old Mole.

DEMOLITION PHASE

Chant uses a Demo Charge to destroy Gun 222B before it can be revived; Smalley destroys the Southern Winding Station.

END OF TURN: 5 Victory Points

0146

SEARCHLIGHT ILLUMINATION PHASE

Unit	dr	Zone Illuminated	Effect
412	3,2	Z	ineffective
432	6,2	2	Effective
342	4,1	A	ineffective
142	4,2	C	Effective

HARBOR DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
—	—	—	Beart	4/Fire, KO [Explodes]
1	4	243	Burt	2/Sinking [crew: 1]
2	4	352	Burt	9/—
3	4	636	Henderson	MISS

COVERING FIRE

Shot #	DRM	Triad	Target	Effect
1	+3*	123	344	MISS

* Flotilla has been reduced to 15 guns with Nock out in the Open Sea.

DOCKSIDE DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
	5	6—	Boyd	MISS
1	3	231	Ryder	2/Sinking [crew:2]
2	4*	461	Fenton	7/Evade, MC [crew: 2, speed]
3	3	443	Burt	MISS

* TH# is increased due to being caught in SL 142.

With the loss of Moss, Don's force ashore is even more imbalanced.

NAVAL MOVEMENT PHASE

To C: Fenton

To B: Wynn (after entering C at high speed and evacuating 3 from Ryder and 2 from Burt)

To A: Horlock, Falconar, Boyd (after torpedoing and destroying Lock Gate 313)

Landing at 336: Platt

To Approach: Henderson, Collier

To England: Nock

Discretion seems the better part of valor, all boats are now heading for England. Things have been too bleak at the Old Mole to expect much chance of a pickup in the Avant Port. The commandos are on their own. Fortunately, Nock's passage of the Open Sea was uneventful so that's 3.6 Victory Points in the bank. Hodgson can at least take solace in knowing that Birney got ashore. Our presence next to Gun 344 did keep it from firing in the Dockside Defensive Fire Phase.

GERMAN ACTIVATION PHASE

A "5" Activation dice roll activates four Strosstrupp units: "4" in 455, "4" in 612, "2" in 236, and a "2" in 125.

LAND MOVEMENT PHASE

BRITISH: Birney (6) to 326, *Swayne* (2) to 317, *Walton* (2) to 327, *Wilson* (6) to 322, Hooper (5) to 337, Newman (5) to 211, *Woodcock* (5) to 211, *Brett* (4) to 232, *Smalley* (6) to 232, *Purdon* (6) to 245, *Chant* (6) in 222, and Roy (6) to 245.

There is no point in Wilson continuing to battle Gun 344 alone—especially now that all troops are ashore—and he is needed at the Power Station to shut down those searchlights. Birney can't reach 344 this turn anyway so he just moves out of harm's way and waits for help from Hooper. Together, they should be able to silence Gun 344 next turn. Everyone else heads for their assigned targets. Newman will draw fire from Flak Tower 434B away from Woodcock to aid the latter in placement of his charges. Newman will then be in position to move north across the Swing Bridge to help cover the northern Demo teams who are now protected only by Roy.

As it turns out, Chant remaining behind to blow the Pump House has no immediate effect on the northern push to the Caisson. He could not have reached any firing position to aid Roy in dealing with the German force in 245. However, it was faintly possible for the German "2" in 116 to reach 111 and bring Chant under fire—perhaps delaying his laying in that charge yet another turn. The biggest problem that I foresee arising from Don's actions at the Pump House is the extra distance that Brett and Purdon must cover to reach their targets when covered by only one assault group.

GERMAN: The Movement die roll is a "4". "4"/492 to 261; "6"/461 to 261, "4"/455 to 484, "6"/408 to 410, "6"/207 to 245.

LAND COMBAT PHASE

Attacker	Target	TH #	TH dr	DR/Effect
Roy (6)	245	6	—	2/eliminates 2
Purdon (6)	245	5	1	5/eliminates 4
Newman (5)	434B	1*	4	MISS
434B	Newman	2*	2	eliminates 1 and ammo

*Long Range or Mortar Fire

DEMOLITION PHASE

Chant prepares charges automatically but has no effect and therefore his charges are at risk. Woodcock's charges are *prepared* on a 2 die roll (needing ≤ 4), but only damage the Swing Bridge.

END OF TURN: 12.6+ Victory Points

0152

SEARCHLIGHT ILLUMINATION PHASE

Unit	dr	Zone Illuminated	Effect
432	6,6	Z	ineffective
412	4,6	A	ineffective
342	5,3	A	Effective
142	2,1	D	ineffective

HARBOR DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	4	264	Wynn	10/MC [crew: 2, Passengers: 1]
2	4	236	Henderson	6/Turn Away, KO
3	5*	541	Boyd	4/Fire, KO
4	4	413	Wynn	8/Evade, C
5	4	556	Fenton	MISS

*TH# increased due to being caught in SL 342

COVERING FIRE

The flotilla, reduced to nine functioning guns in Zones A, B and C has a +4 DRM and needs a "3" To Hit dice roll. It rolls a "6".

DOCKSIDE DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	5*	261	Boyd	7/Evade, MC [crew: 3]
2	5*	162	Boyd	6/Turn Away, KO [Sinking]
3	3	116	Falconar	4/Fire, KO
4	5*	642	Boyd	MISS
1	1	644	Wynn	MISS
1	3	522	Fenton	MISS

*TH# increased by two due to being on fire and caught in SL 342

NAVAL MOVEMENT PHASE

Collier to Open Sea, Henderson in Approach, Horlock (after evacuating 1 from Falconar) and Wynn to Approach, Platt to B, Fenton damages Lock Gates 212 in a torpedo attack and remains in C.

I opted for an insurance attack against Lock Gate 212 with Fenton even though Wynn's already hit it with his Delayed Action torpedoes. Fenton's reduced speed and sorry condition make it unlikely he'll survive, so I think it's best to get whatever I can out of him now while he is in a target Zone. The Damage DRM may be the difference when Wynn's torpedoes detonate.

GERMAN ACTIVATION PHASE

An "8" Activation dice roll activates five units: "4" in 523, "2" in 164, "2" in 534, "4" in 536, and a "2" in 114.

LAND MOVEMENT PHASE

BRITISH: *Swayne* (2) in 317, *Wilson* (6) to 315, Birney (6) to 317, *Walton* (2) to 333, Hooper (5) to 352, *Woodcock* (5) in 211, Newman (4) in 211, *Chant* (6) in 222, *Smalley* (6) to 256, *Brett* (4) to 256, *Purdon* (6) to 253, Roy (6) to 253.

Walton and Swayne are too weak to proceed to their targets unescorted so they will hang back and wait for help. Birney and Hooper will have to forego the planned attack on Gun 344 to help cover the Demo teams. Actually, there is little point in taking the gun out now anyway as the boats have all bought the farm. Birney and Wilson should be able to ambush the German "6" in 310. To the north, the four units in 253 and 256 not only have reached their Primary Targets but should be able to support each other with a crossfire into 255.

I see no point in attacking the gun in 344; it would be better simply to bypass it and get on with the job

at hand.

GERMAN: The Movement die roll is a "5". "6"/261 to 255, "6"/410 to 310.

LAND COMBAT PHASE

Attacker	Target	TH #	TH dr	DR/Effect
Roy (6)	255	6	—	4/eliminates 4
Smalley (6)	155	4	2	4/eliminates 2
Purdon (6)	255	5	6	
Brett (4)	255	3	1	1/eliminates 1
Birney (6)	310	6	—	1/eliminates 1
Swayne (2)	310	1	3	
Wilson (6)	310	5	6	
Newman (4)	434B	1*	4	
"5"/310	Birney	5	1	2/eliminates 2, and ammo
"1"/255	Smalley	1	6	
434B	Newman	2*	3	

* Long Range or Mortar Fire

DEMOLITION PHASE

Wilson (6) fails to place charges [4]. Woodcock (5) places charges again automatically but with no effect. Chant's At Risk charges blow, but only damage the Pump House. Purdon (6) fails to place charges [4]. Brett (4) places charges [2] and destroys the Northern Caisson. The number in [brackets] is the number needed for a successful placement.

Don is exceedingly lucky to destroy the North Caisson. There was only a one-third chance to place the charges, and then a one-third chance to destroy the target completely. In other words, he just beat 11% odds.

END OF TURN: 24.6+ Victory Points.
German "4" and "2" in 511 consolidate.

0158

SEARCHLIGHT ILLUMINATION PHASE

Unit	dr	Zone Illuminated	Effect
432	4,2	3	Effective
412	5,4	A	ineffective
342	1,5	B	ineffective
142	3,4	D	ineffective

HARBOR DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	4	461	Fenton	7/Evade, MC [crew: 2, sinking]
2	4	166	Wynn	9/Evade
3	4	615	Platt	MISS

Covering Fire is now reduced to Platt's remaining two gun factors. The resulting +5 DRM renders all but a "snake-eyes" roll meaningless.

DOCKSIDE DEFENSIVE FIRE

Shot #	TH #	Triad	Target	DR/Effect
1	3	2—	Platt	8/Evade, C
2	3	1—	Platt	7/—, MC [crew: 2]
3	3	5—	Platt	MISS
1	3	4—	Fenton	MISS

NAVAL MOVEMENT PHASE

Collier withdraw uneventfully to Britain during the preceding Harbor Defensive Fire Phase. Henderson, Horlock, and Wynn now move to the Open Sea. Platt remains in Zone B—the sole naval target for the coming turn. His chances of survival are somewhere between slim and none, but at least he will distract the searchlights. For that we have Fenton to thank. Had he not kept Gun 131 occupied shooting up his sinking hulk, Platt would have been hit again.

GERMAN ACTIVATION PHASE

A "7" Activation dice roll adds five German units; "2" in 433, "6" in 241, "2" in 564, "4" in 331, and a "4" in 215.

LAND MOVEMENT PHASE

BRITISH: Wilson (6) in 315, Birney (4) to 315, Swayne (2) to 324, Walton (2) to 327, Hooper (5) to 327, Newman (4) to 356, Woodcock (5) in 211, Chant (6) in 222, Roy (6) to 262, Purdon (6) in 253, Smalley (6) to 255, and Brett (4) to 255.

Roy and the Demo teams from the Northern Caisson move to cut off the northern Swing Bridge while avoiding the field of fire of Gun 462. Newman tries to remove the annoying fire from the minesweeper in 354 that could hinder future demolition attempts against the Swing Bridge in 343. Walton

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falls back to 327 for Hooper's protection from the sudden appearance of Germans on Lock Gates 331. There are too few Demolition units here to risk any of them prematurely. Birney moves to the probable destruction of the German "5" to help Wilson—improving his terrain position in the bargain.

Newman's move to engage 354 seems pointless. That Swing Bridge in 343 looks to come under a great deal of fire—enough that eliminating this "2" is little gain. Better to have kept him safe by staying out of the play of the guns in 434 by moving south. Course, going that way will take longer. Personally, I'd just keep Newman where he is to protect Woodcock, and then accompany Woodcock looking for opportunities when the swing bridge is down.

GERMAN: The Movement die roll is a "2". "4" and "6"/511 move to 408, "4"/484 to 492, "4"/611 to 493, "4"/261 to 262, "2"/164 to 153, "2"/124 to 123, "2"/116 to 112, "2"/113 to 112, "4"/331 to 320, "5"/310 to 315.

LAND COMBAT

Attacker	Target	TH #	TH dr	DR/Effect
Roy (6)	262	6	—	6/eliminates 4
Smalley (6)	255	6	—	—/eliminates 1
Hooper (5)	320	6	—	2/eliminates 2
Walton (2)	320	1	3	
Newman (4)	354	4	3	2/eliminates 2
Birney (4)	315	5	5	2/eliminates 2
Wilson (6)	315	5	2	2/eliminates 2
"2"/320	Hooper	2	3	
"1"/315	Birney	1	5	
434B	Newman	2*	4	
464B	Roy	2*	2	eliminates 1

* Long Range Fire

Again, Don is lucky in the exchange of fire, and Wilson faces no threat now.

DEMOLITION PHASE

Wilson (6) fails to place charges [5]. Woodcock destroys the Swing Bridge. Chant (6) automatically sets charges and destroys previously damaged Pump House. Purdon (6) automatically sets charges and destroys Northern Winding Station.

END OF TURN: 39.4+ Victory Points.

Three pairs of "2's" consolidate in 112, 433, and 541.

0204

SEARCHLIGHT ILLUMINATION PHASE

Unit	dr	Zone Illuminated	Effect
412	4	A	ineffective
432	5	3	Effective
342	5	A	ineffective
142	1	D	ineffective

NAVAL PHASES

The first Harbor Defense Fire shot results in a miss, as does Platt's Covering Fire retorte. The first Dockside Defensive Fire shot scores a "Turn Away, KO" against Platt, but the second misses, so Platt—barely afloat in Zone B—remains around to draw the attention of the searchlights for yet another turn. Henderson, Horlock, and Wynn all withdraw safely to England for another 3.4 Victory Points.

GERMAN ACTIVATION PHASE

A "12" dice roll activates seven Stosstrupp units. An eighth is cancelled when it appears in 255 with Commandos present. The new arrivals are: "4" in 452, "4" in 342, "4" in 656, "6" in 453, "2" in 513, "6" in 656, and a "6" in 464.

LAND MOVEMENT PHASE

BRITISH: Roy (5) to 492, Purdon (6) to 261, Brett (4) to 261, Smalley (6) to 261, Chant (6) to 201, Woodcock (5) to 330, Newman (4) to 343, Hooper (5) in 327, Walton (2) in 327, Swayne (2) to 317, Birney (4) in 315, and Wilson (6) in 315.

Chant is out of charges so he will move south to provide cover for the late attempts against the southern bridges. The Demo teams there are so weak that I dare not expose them to fire, but time is rapidly running out. If the German Movement die roll improves, the southern bridges will be swamped. This may be the last turn that I have the luxury to voluntarily hold them back from their targets. Roy leads the assault against the Northern

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Swing Bridge in what probably amounts to a suicidal charge, but if that bridge is to be blown it is now or never.

Roy is sacrificed. And, with little else available, Chant may as well head for Zone 3—as will the survivors of Smalley, Brett and Purdon when the swing bridge goes down. The reason that this bridge is so important, beyond its obvious point value, is that it will reduce the German influx from Zone 4. Of course, these British in the north may well be cut off by the influx from Zone 1 across the Southern Caisson, but if the swing bridge is down they won't have to watch their backs.

GERMAN: The Movement die roll is a "6". Therefore, only the "6's" move; from 464 to 463, 453 to 456, and 408 to 409.

LAND COMBAT PHASE

Attacker	Target	TH #	TH dr	DR/Effect
Roy (5)	492	6	—	1/eliminates 1
Brett (4)	492	3	5	
Smalley (6)	492	5	1	6/eliminates 3
Purdon (6)	462	5	3	1/—
Chant (6)	215	4	2	6/eliminates 4
Hooper (5)	320	6	—	6/eliminates 2
Birney (4)	315	5	4	1/eliminates 1
462	Roy	5	1	1/eliminates 1
"6"/463	Roy	6	—	5/eliminates Roy
464B	Purdon	2*	4	
434B	Woodcock	2*	6	

*Long Range Fire

DEMOLITION PHASE

Smalley places charges [3], but with no effect and those charges are now at risk. Wilson places charges automatically and blows up the Power Station, thereby shutting down all searchlights.

END OF TURN: 45.8+ Victory Points

0210

NAVAL PHASES

Platt is finally dispatched in Zone B by the first shot of Harbor Defense Fire. The naval segment of the game is now over. Any searchlights which are restored will now be looking to shore for their targets.

GERMAN ACTIVATION PHASE

A "6" Activation dice roll brings on five Stosstruppen: "6" in 666, "6" in 253, "6" in 563, "2" in 412, and a "6" in 516.

LAND MOVEMENT PHASE

BRITISH: Birney (4) to 410, Wilson (6) to 321, Swayne (2) to 321, Newman (4) to 343, Hooper (5) to 448, Walton (2) to 343, Woodcock (5) to 320, Chant (6) to 365, Brett (4) to 262, Smalley (6) in 261, and Purdon (6) in 261.

The northern Demo teams are going to really catch it this time. If they don't blow the bridge this turn, there won't be any of them left to try. To the south, I've finally bought Swayne and Walton an unmolested turn on their targets, but in their weakened condition, it may take quite a while to set their charges.

Hooper and Birney are sacrificed to buy time for Swayne and Walton to give it their best shot—just as Roy was last time. Newman, meanwhile, gives some cover to Walton. At the other end of the harbor, Brett is obviously trying to cover against the Germans coming up from the rear in 253. I see no reason to write these fellows off yet even though Don just wants the points for the swing bridge in 261.

GERMAN: The Movement die roll is a "3". Germans move: "6"/409 to 410, "4"/409 to 413, "6"/511 to 408, "6"/541 to 439, "4"/452 to 481, "6"/463 to 261, "4"/493 to 463, "6"/456 to 492, "6"/253 to 262, two "6's" in 641 to 155, "4"/112 to 203, and "4"/342 to 336.

LAND COMBAT

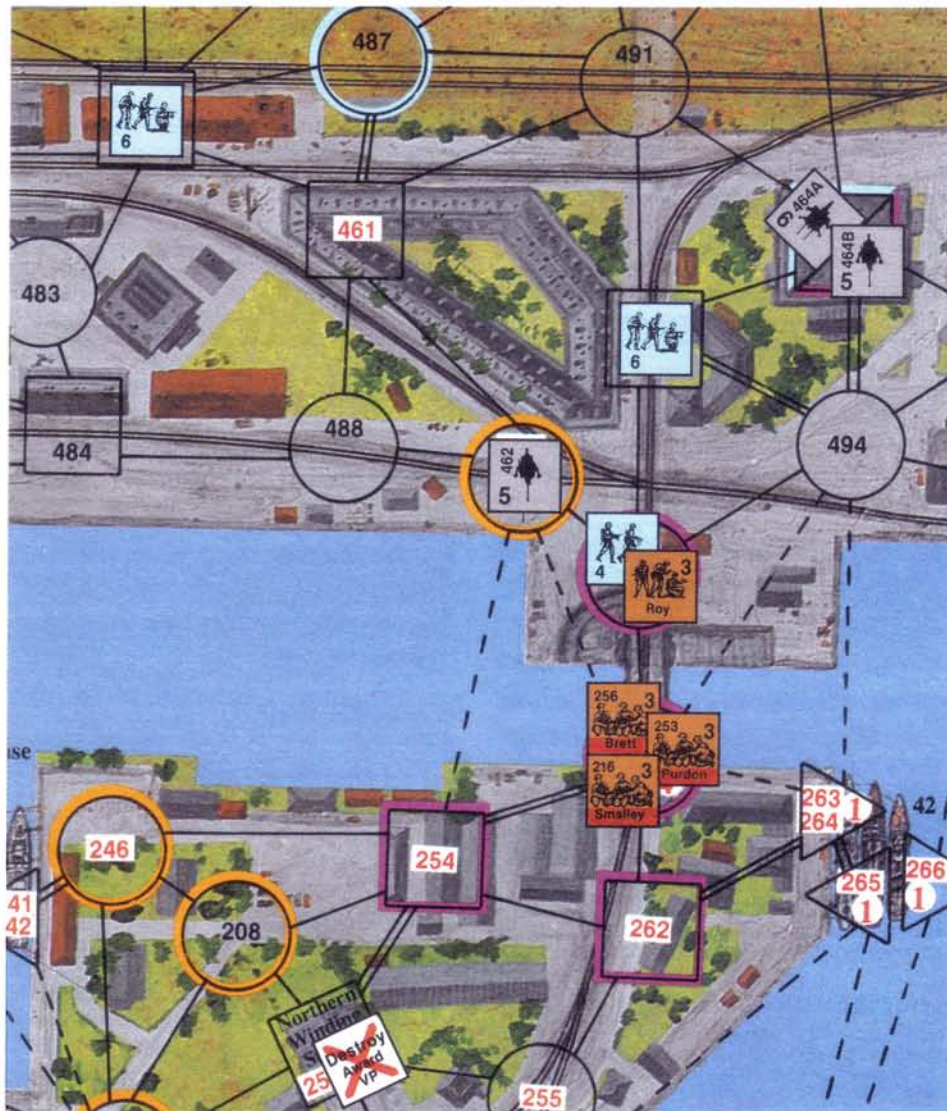| Attacker	Target	TH #	TH dr	DR/Effect
Smalley (6)	261	6	—	4/eliminates 4
Purdon (6)	261	6	—	2/eliminates 2
Brett (4)	262	3	3	3/eliminates 3
Hooper (5)	433	5	4	3/eliminates 3
Newman (4)	433	4	6	
Birney (4)	410	6	—	4/eliminates 4

(Game map illustration with zone markers: 487, 491, 461, 483, 484, 488, 494, 464A, 464B, 462, 246, 208, 254, 262, 255; unit counters including Roy, Brett, Purdon, Smalley; tokens 256, 253, 216, 263/264, 265, 266, 41/42, 42; "Northern Windmill", "Destroy Award VP 25")

Again, Don's luck holds good and Purdon and Brett both chalk up kills against their immediate threats. But Brett pays the piper.

DEMOLITION PHASE

Despite the heroics on the Northern Swing Bridge, *Smalley's* charge still fails to blow. But in the south, *Wilson* prepares charges [4] and blows Lock Gates 331 while *Woodcock* does likewise [3] to Swing Bridge 343. This unexpected twin success cuts off the Assault teams on the mainland.

END OF TURN: 57.8+ Victory Points "2" and "4" in 511 consolidate.

0222

SEARCHLIGHT RESTORATION PHASE

Unit	DR/(dr)	Zone Illuminated	Effect
432	5 (3)	4	Effective
412	(6)	3	ineffective
342	(4)	3	Effective
142	7 —	1	ineffective

NAVAL MOVEMENT PHASE

Minesweepers 223 and 224 withdraw to U-Boat Pens, thereby activating a "4" and a "6" in 443.

GERMAN ACTIVATION PHASE

A "2" dice roll activates three units: "4" in 652, "2" in 512, and a "2" in 311.

LAND MOVEMENT PHASE

BRITISH: *Smalley* (2) in 261, *Purdon* (2) to 261, *Chant* (6) to 351, *Woodcock* (5) to 346, *Wilson* (6) to 320, *Swayne* (2) to 319, *Birney* (4) to 426, *Hooper* (4) to 432, *Newman* (4) to 432.

The cut-off Assault teams will try to fight their way to the Swiss border. Again, their best chances for survival are to attack the blocking forces I think. The best defense for the British is always a good offense. Sidestepping the "6" in 432 only delays the day of reckoning, and he may have more friends later. *Smalley* will man his charges to the end. All that remains for the rest is to use their remaining charges on a spare ship or two. I'll concentrate on the tugs since they neither withdraw nor automatically activate Stosstrupps when boarded and are worth just as many points.

Don goes right at the German "6" in 432. Why? I would have been tempted to slide to 431 in my attempt to reach haven. After all, no others may show up, and the Germans can't match the British movement.

GERMAN: The Movement die roll is a "6". Only "6's" will move this turn; two in 135 to 126, 111 to 203, and 413 to 409.

LAND COMBAT PHASE

Attacker	Target	TH #	TH dr	DR/Effect
Purdon (2)	462	1	1	6/Gun Out of Action
Chant (6)	345	4	1	6/eliminates 2
Hooper (4)	432	3**	6	
Newman (4)	432	3**	4	
Birney (4)	432	4	5	
"6"/432	Hooper	6	—	5/eliminates Hooper
"2"/432	Newman	2	5	eliminates 1
434B	Wilson	3*	1	eliminates 1
464B	Purdon	2*	1	eliminates 1

* Long Range Fire
** Grenade Attack

DEMOLITION PHASE

Despite his remarkable proclivity for staying alive, *Smalley* must have been sleeping in demolitions class; his charges still refuse to blow.

END OF TURN: 57.8+ Victory Points

Wilson (6)	410	5	1	6/eliminates 2
462	Purdon	5	2	4/eliminates 4
"6"/492	Smalley	6	—	4/eliminates 4 and ammo
"3"/262	Brett	3	4	
464B	Purdon	2*	6	
"1"/433	Hooper	1	5	
"4"/413	Birney	4	5	
434B	Hooper	2*	1	eliminates 1

* Long Range Fire

Bad luck for the Germans. They could have had good shots at Brett and Birney.

DEMOLITION PHASE

Smalley's charges fail to blow. *Walton* fails to place his charges [1], but *Swayne* places his [1], and destroys the Swing Bridge at 321 in an unexpected success.

END OF TURN: 49.8+ Victory Points

0216

SEARCHLIGHT RESTORATION/ ILLUMINATION PHASE

Unit	DR/(dr)	Zone Illuminated	Effect
432	12	—	ineffective
412	4	3	Effective
342	7	3	Effective
142	8	—	ineffective

GERMAN ACTIVATION PHASE

A "7" Activation dice roll activates five units: "4" in 533, "6" in 656, "2" in 425, "6" in 116, and a "2" in 226.

LAND MOVEMENT PHASE

BRITISH: *Purdon* (2) to 262, *Smalley* (2) in 261, *Brett* (4) to 261, *Chant* (6) to 330, *Woodcock* (5) to 343, *Walton* (2) in 343, *Newman* (4) to 448, *Hooper* (4) in 448, *Birney* (4) to 438, *Wilson* (5) to 331, *Swayne* (2) to 323.

As expected, the lads on the Penhouet Swing Bridge have bought it. *Purdon* and *Brett* exchange places in the vain hope that Brett can better protect Smalley long enough to blow the bridge. Chant, with no charges of his own to destroy the 212 Lock Gates, moves south so that the Germans crossing the Southern Caisson into Zone 2 will be closer to and attracted towards the firing to the north. The Assault teams in Zone 4 could be cut off if both bridges are blown, but that is a sacrifice gladly made for that unlikely event.

Actually, I would have held Chant in good terrain in 365 and shot down any German crossing of the damaged lock gates. This might take enough heat off the group at the Penhouet Basin to give them a chance to get back to 201 and then cross over. But Don has written them off completely.

GERMAN: The Movement die roll is a "5". Only "6's" will move this turn; two in 155 to 135, 116 to 111, 492 to 261, 439 to 432, and 408 to 413.

LAND COMBAT

| Attacker	Target	TH #	TH dr	DR/Effect
Purdon (2)	262	2	1	5/eliminates 3
Brett (4)	261	4	1	6/eliminates 6
Smalley (2)	462	1	6	
Hooper (4)	433	4	2	5/eliminates 1
Birney (4)	434B	1*	3	
Newman (3)	434B	1*	3	
462	Brett	5	3	6/eliminates Brett
464B	Smalley	2*	5	
434B	Hooper	2*	6	

*Long Range or Mortar Fire

GAME SUMMARY

The last struggles of the few remaining commandos are listed here in abbreviated form. At 0234 Birney and Newman were wiped out in 439—one area away from a successful escape. *Wilson* boarded and sunk tug 345 with his last Demo Charge. At 0240 *Smalley* (1) was finally eliminated on the Swing Bridge. His defective charges were passed to *Purdon* (1) who had no better luck in getting them to detonate. At 0246 *Purdon* was eliminated by Germans who entered the northern Swing Bridge and removed the defective charges. *Wilson* was eliminated at 0252, as were *Walton* and *Swayne* at 0258. *Walton* was eliminated while trying to place a charge on the last tug and *Swayne* was frustrated when the minesweeper he had prepared charges on was withdrawn to the U-Boat Pens. With it went the last remaining Demo Charges and any chance to score additional points.

Wynn's Delayed Action torpedoes detonated and, with the aid of Fenton's previous damage drm, destroyed Lock Gates 212 to bring the Victory Point total to 62.8. The game thus comes down to the final die roll. Twelve Victory Points for the destruction of the Southern Caisson will be sufficient for victory if the *Campbeltown's* delayed charges can destroy the Southern Caisson on a die roll of 1-4 (thanks to the −1 drm for ramming at full speed). The inability of the destroyer to be scuttled prevents another −1 drm. A damage result (die roll 5) or no effect (die roll 6) will result in a German win.

As luck would have it, these Germans must have been awake during demolitions class. Apparently they found the charges and managed to partially disarm them for the final die roll is a 5 and the Germans (i.e., the game system) win.
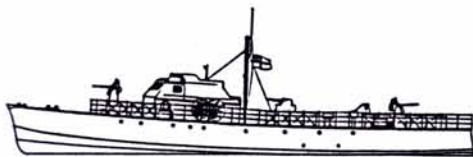
I've not much to add to the concluding turns, as the primary action is finished and Don is merely seeing what becomes of his remaining remnants. As usual, Don's play was excellent—with one exception.

Note that in the historic operation, each commando officer was ordered not to be distracted from his primary target, to take the quickest and shortest route there, and to deal with the demolition of that target while German confusion was at its height. Even Mr. Seaman, in the conclusion to his piece elsewhere in this issue, notes that the player must use the Campbeltown commandos to garner as many points as quickly as possible. This makes Don's choice of actions around the Pump House with Brett and Purdon questionable. With the half value added for the damaged Southern Caisson, he ends the game with 68.8 points. Consider, if they had not paused, had all gone into the Pump House at 0140 to maximize their time and movement, might not Don's demolition parties have managed to eliminate, or at least damage, the bridge in 261. And, all other events being the same, would this not have given the British the victory?

Don's sole tactical "error" in this replay is extremely subtle, and a strong case can be made for the action he did take. I, on the other hand, am of the philosophy that to win you must push hard in the first few turns ashore, ignoring losses and keeping a steady eye on the targets for demolition. You can, almost invariably, ignore the guns that threaten and bypass them to reach your targets; let the assault troops deal with them. Being distracted by the troubles of one commando party may mean that others fail to complete their assignments. Pausing to deal with the Pump House guns is a prime example.

But that's the marvelous thing about RAID ON ST. NAZAIRE; it's so easy to spot the decision that brings defeat in retrospect, and so difficult to say definitively that the decision was "wrong". Any choice that leads to victory in one playing may well, when made under similar circumstances in the next, bring disaster. The strength of the game's design is the flexible and always differing enemy response to your actions, unlike the rigid responses found in most solitaire games. RAID ON ST. NAZAIRE is a game that demands quick thinking in a rapidly changing combat environment and the constant willingness to take a deadly risk—the very apotheosis of the British commando.

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VARIATIONS ON A RAID
Options for RAID ON ST. NAZAIRE
By Mark Hunter

Players of *RAID ON ST. NAZAIRE* are already aware of the game's excellent playability and historical accuracy. Indeed, after numerous playings, I have been pleasantly surprised at how closely the course of the game usually follows the actual raid. But further research into the history of the commando raid (which the game spurred me to) revealed that the final assault plan was the result of numerous compromises. One of the original options considered was for the raid to take place during a major bombing raid. The first following scenario is my proposal for simulating that major raid, rather than the mere diversion that historically took place. Too, there was also the proposal that a second destroyer carry in half the commando force, which was rejected by the British naval command. To give the players even more control of planning, another scenario details how to simulate that plan.

And, for variation, we can consider the possibility of French civilian involvement, the possibility of lock gates or caissons being open, the documented fire of German troops on their own, and the role of leadership in the British forces ashore. The strength of any good design is the willingness to play it numerous times. And the historicity of any good design is indicated by the number of legitimately-based optional rules it can bear. *RAID ON ST. NAZAIRE* succeeds on all levels.

OPTIONAL SCENARIOS

16.3 *SEA ASSAULT DURING BOMBING RAID:* During the early planning stages of the raid on St. Nazaire, the intent was to have an RAF raid begin before the sea assault and continue *during* the land demolitions. Though the commandos would certainly have been subject to casualties from their own air force, it was felt that the boats would have been much more successful in reaching their landing zones unscathed and then withdrawing the surviving commandos. This scenario recreates that possibility.

16.31 Each game turn begins prior to the Gun/Searchlight Restoration and Searchlight Illumination Phase (4.1) with a die roll to determine if the British boats are detected by the Germans. A die roll less than the current game turn number results in their being detected; any other result means they are undetected.

16.311 *If undetected*, the Gun/Searchlight Restoration and Searchlight Illumination Phase (4.1) and the Naval Attack Phase (4.2) are skipped in the order of play.

16.312 *If detected*, the game turn proceeds normally. Once detected, the British are considered detected for the course of the game and play proceeds normally.

16.32 Each turn, after all Commando units ashore have moved, a Triad is thrown to determine if any have been affected by the bombardment. If the first die of the Triad is less than or equal to "3", a commando unit may have been hit. The remaining two dice of the Triad determines the affected unit; the ID number of each Commando unit is that of the boat which brought it ashore—even though they may no longer be upon it. Should a passenger of the *Campbeltown* be the affected unit, make a subsequent die roll (1-6, starting with Roy and proceeding in order through Purdon) to determine exactly which is hit. If the Triad indicates that there were no commandos aboard the boat or that commando

unit has been eliminated or is aboard a boat, there is no effect for this turn.

16.321 After a commando unit has been determined as being hit, an effect die roll is made to find the number of Strength Points lost.

16.33 At the conclusion of each game turn, a dice roll is made to determine if the bombing raid continues. On a dice roll less than the current turn number, the air raid ends and 16.32 is no longer in effect.

16.34 During the bombing raid, all German Activation (4.5) die rolls are modified by −1 and all German Movement (4.62) die rolls are modified by +1.

16.35 French citizen rules (Optional Rule A) cannot be put into effect until after the bombing raid ends.

16.4 *SECOND DESTROYER:* Original planners hoped for a second destroyer to accompany the *Campbeltown* and carry half the commandos to the Old Entrance. Certainly, in light of the casualties among the small boats and the greater protection of steel plate, more troops would have likely made it ashore. In this scenario, it is assumed that the British Admiralty released a second Lend Lease destroyer, lightened as was the *Campbeltown* to cross over the mud flats but without the explosive charges. Remove all small boats from the game, and add a second destroyer with the same "Game Log" statistics as the *Campbeltown*. In addition, this ship carries eight torpedoes. Each destroyer may now carry up to seven commando units; the player must select which from among the 19 in the game and assign them to each destroyer. This second destroyer must land its troops at Area 366. Note that the *Campbeltown* ID# is now 11-26; that of the second destroyer is 31-46. Hits on ID numbers above 51 are ignored, but do count as a shot taken.

OPTIONAL RULES

A. *The French Citizens*: The following rules are to reflect the small, but potentially influential, impact of the French citizenry in the St. Nazaire area. All actions of the French people occur within the region bounded by 429-439-344-309-308-408-418 inclusive. The numbered areas with this region are referred to as the "French Zone".

A.1 During the raid, particularly toward the end, the commandos occasionally sought French help in trying to elude capture. During the Commando Movement Phase of any turn, but prior to expenditure of any movement factors, a commando unit may—while in the "French Zone"—attempt to obtain French help. It is successful on a die roll less than "4". If the unit is unsuccessful, it may not try again this game turn but continue movement, less one movement factor. Any number of British units may attempt to locate French help, but each must check separately and only once per turn. Should the unit be successful in obtaining French aid, all movement lines for that unit within the "French Zone" are considered single lines (i.e., requiring only one movement factor) for that game turn only.

A.2 After the raid, the Germans made accusations that some French citizens, thinking that an Allied invasion had begun, attacked German troops. To reflect this possibility, add a chit labeled "French Partisans" to the German counters of each Alarm

Level from "2" onward. During the German Activation Phase, there is a chance that such a counter may be drawn.

A.21 When the French counter is drawn from the cup, it is temporarily put aside until all required German Stosstrupp are drawn. When making Triad dice rolls for placement of the German counters, the *first* area in the "French Zone" indicated is instead filled with the French Partisan counter. If no "French Zone" location is rolled, the Partisan counter is returned to the cup. All remaining German counters drawn are placed normally thereafter.

A.22 The strength of the French Partisan unit is equal to one-half of a single die roll (fractions rounded down).

A.23 French Partisan units move after all possible German units have moved and fire after all possible German units have fired. French Partisan units move in the same manner as the Germans except that they always have a movement factor of "3" (regardless of the German Movement die roll) and always move toward German units. Finally, French Partisan units may only move adjacent to, never *into*, German occupied areas—though Stosstrupp in any adjacent into French occupied areas.

A.24 When considering equidistant areas or fire options between British and French Partisan units, the German unit always moves/fires at the British.

B. *Locks and Caissons*: British planners realized that there would be a slight chance that the Southern Caisson and/or the Old Entrance Lock may have been open upon their arrival. The first British boat to enter Zone C triggers a die roll to determine the status of the lock and caisson. On a die roll less than "6", both are closed. On a die roll of "6", make a subsequent die roll: on a roll less than or equal to "4", the Southern Caisson is open; on roll of "5", the Old Entrance lock is open; on a roll of "6", both are open.

B.1 *Open Southern Caisson*: The ships *Passat* and *Schledtstadt* are considered withdrawn and areas 233/234 and 251/252 may not be entered. The Southern Caisson (111) is still a permissable landing zone, but it may not be rammed. Victory Points for its destruction must be by set demolition charges, *but against area 203* (not 111).

B.11 Wynn only (MTB 74, 65-66) may enter the Normandie dock (expending all movement points) if he begins in Zone C in an attempt to destroy the Northern Caisson by delayed action torpedoes; there is a +2 modifier to the Effects Die Roll. While in the Normandie dock, Wynn is immune to Harbor Defensive Fire and Dockside Defensive Fire, but may be fired upon by Stosstrupp in any adjacent area (e.g., 207 or 115). If a hit is secured, roll for damage on the Harbor Defensive Fire Table with a +1 modifier. German firing choice between adjacent commando units or Wynn's boat is determined at random.

B.2 *Open Lock Gate*: Only Wynn's boat (MTB 74, 65-66) may enter the St. Nazaire Basin (expending all movement points) if he begins in Zone C. Wynn may attack the German vessels there normally, or attack the U-Boat Pens (441, 443 or 444) with delayed action torpedoes; there is a +1 modifier to the Effects Die Roll against the completed pens

ASL ARMOR STUDIES
Exceptions to the Rule
By Lorrin Bird

Although the basic armor game presented in *ADVANCED SQUAD LEADER* works out exceedingly well for the majority of tanks and weapons, and represents the pace-setting miniatures rule set nicely, wargame systems designed to cover *all* AFV almost invariably fail to do proper justice to a number of tanks that are unusual. There is always a group of tanks, and scattttered individual vehicles, with armor protection and areas that cannot be fit into the general system used to define armor ratings. In terms of *ASL*, three areas of tank design and protection can be identified where vehicle vulnerability in the game might be better reflected—APCR hits on sloped armor, split hull ratings where upper and lower hull protection is significantly different, and the "Stalin" tank turret front protection.

Studies of APCR hits on sloped armor indicate that the effective resistance of the armor to penetration increases by up to 32% over the AP shell value when APCR hits occur. For the cases where APCR hits highly sloped armor, the resistance of the plate is often sufficiently higher than the AP shot value that wargame rules should present *two* armor ratings, one for AP and another for APCR (for the purposes of this article, "AP" includes all non-APCR shells).

Examining armor protection on the front hulls of AFV, there are a number of cases where the hull presents two large areas (upper and lower nose) with different effective armor thicknesses. For vehicles such as the IS-2m, with 26 AF armor on the upper hull glacis but only 14 AF protection on the lower hull front (equating the actual effective armor thickness to the *ASL* system AF rating), limiting the hull front designation to a consideration of only the 26 AF glacis obviously overstates the difficulty involved in obtaining front hull penetrations.

Referring back again to the "Stalin" tanks (IS-2 and IS-2m), the armor protection indicated by the game AF ratings for the turret front is not a true indication of the vehicle vulnerability on turret hits. While the turret face was 160mm thick, with steep slopes, the gunshield (or mantlet) was 100mm thick at its maximum cross-section, and thinned out towards the upper and lower edges. The 18 AF turret front armor rating is a reasonable model for the turret face but severely limits, or rules out, the possibility of a penetration by shells with sufficient penetration to punch through the 11 AF gunshield (such as the 75L and 88L).

In view of the possibility for several improvements to the *ASL* armor rating system for select vehicles, the following sections of this article will propose some simple-to-use variants that add extra detail. The intent of the suggested improvements is not to replace the overall *ASL* armor system but to round out some of the edges that still contain a bit of roughness.

APCR Hits on Sloped Armor

The earliest theory used in armor gaming to explain the effective resistance of sloped armor to penetration was the $T = 1/cosine\ A$ formula, where "T" was the distance a shell had to travel to pierce the plate, and "A" was the slope of the plate (measured from vertical; so a vertical plate had no slope and a horizontal plate equaled 90° slope from vertical). For tanks such as the T34/76, where a 45mm hull plate was sloped 60° from vertical, the above formula predicted a 90mm effective thickness (i.e., a shell required at least 90mm penetration against a vertical target to pierce the 45mm plate

sloped at 60°).

The main problem with the 1/cosine formula of effective thickness was that actual ballistic tests, where plates were fired upon by shells, produced results that were not constant with the predicted value. During WWII, the U.S. Army test fired most of the armor piercing shells in their inventory against plate sloped at a variety of angles and published the results in "Technical Manual TM9-1914". The Army found that a 60° slope from vertical increased the effective penetration resistance by 160%, as opposed to the 100% increase predicted by the 1/cosine formula. Thus, when a 76mm shell hit 45mm at 60° slope, the effective thickness was actually 117mm (a 30% increase over the 1/cosine value).

Illustration 1
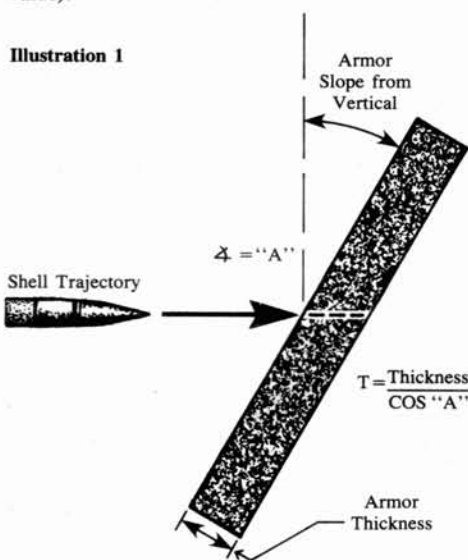
The 1/COSINE formula assumed a simple geometric approach to effective thickness determinations.

Consistent with the overall use of state-of-the-art design procedures in *ASL*, the armor values used to define game AF ratings are based on the actual ballistic slope multiples found during test firings. Thus, players are using theoretical armor protection quantities that are consistent with the actual performance of AP shells against sloped plate. The only problem that one might find with this approach is that APCR rounds have been found to vary significantly from AP shell performance as the slope of the armor exceeds a 20° slope.

Comparing U.S. and German data for APCR round penetration against sloped armor, the result is that sloped armor resists penetration against APCR with a greater effective thickness than opposes AP shells. For instance, the British 76LL round could penetrate the Panther upper front hull (80mm at 55° slope) at 500 meters, where the shell penetrated about 180mm of vertical plate (the armor had an effective thickness of 180mm versus 76LL AP). The U.S. 76L APCR round, with over 210mm penetration at 500 meters, could only penetrate the same Panther hull armor out to 250 meters, where the penetration was 228. Thus, the APCR round was resisted by an effective thickness 48mm greater than experienced by the AP hits.

The German 88L APCR round, which is similar to most of the other German high velocity armor piercing rounds in terms of slope effects, was resisted by 132mm effective thickness on hits against

the T34/76 front hull. Due to the fact that the 88L was unusually effective against sloped armor (while most shells experience a 160% increase in armor resistance for 60° slopes, the 88L AP only saw an increase of 138%), the T34 hull front represented a 107mm effective thickness versus AP. The effect of APCR hits on armor effective resistance can therefore be equated to a 23% increase over AP hits.

A study of the differences between AP and APCR effective thicknesses indicated that AF ratings would only need to be supplemented with special APCR upgradings when the slope exceeded 20°, and then only for a select number of AFV. It was also noted that the AFV with special APCR armor ratings fortunately fell into some general groupings (such as all T34/76 and T34/85) which simplified the presentation of study findings. The following table indicates the AFV where APCR will increase the *ASL* AF ratings by one level (for example, "8" becomes "11") and the target armor that is improved versus APCR:

VEHICLE ARMOR IMPROVED BY APCR HITS

AFV	Armor to be Upgraded
all T34	HF, HS, HR
all OT-34	HF, HS, HR
all T43	HF, HS, HR
T44	HF
PzKpfw VIB	HS, HR)
JgPz IV	UBF
JgPz IV(L)	UBF
JgPz IV(70L)	UBF
all JgPz 38(t)	UBF
Elefant	HF

* HF, HS, and HR refer to hull front, hull side and hull rear respectively. UBF refers to Upper Body Front hits on SPG or TD. These armor upgradings only apply to Russian-Soviet combat.

From a game play perspective, introduction of APCR armor upgrading will significantly affect the lethality of high velocity shell hits on armor. On the actual battlefield, the T34 front hull presented 132mm resistance to German APCR, so the 50L APCR round (116mm penetration at 500 meters) would be outmatched. With use of APCR armor upgrading in *ASL*, the 17 TK# of 50L APCR (from seven to twelve hexes) will be resisted by 14 AF hull protection on the T34—for a resulting TK# of "3" (8% chance of penetration damage). Thus, the results of using armor upgrading will be to bring game results more closely into line with expected battlefield performance (using AF of 11 for the T34 front hull would allow 42% of APCR hits to cause damage).

Split Hull Armor Ratings

The main problem area associated with rule systems that describe AFV hull and turret protection with a single factor is the handling of different ratings on the hull or turret. The IS-2m had 26 AF glacis protection, but a 14 AF lower hull front; and the Panther upper hull was 18 AF with a lower hull area equivalent to 14 (the Panther upper and lower hull fronts were both sloped at 55°, but the lower hull was 60mm thick and the upper area was 80mm). If only one rating is chosen, the use of the higher factor overestimates the protection, while the use of the lower rating produces unrealistic vulnerability to penetration.

To allow for a more complete description of the full armor protection, the following table was developed. From an analysis of areas presented to incoming rounds, a statistical distribution of hits

ASL ARMOR SYSTEM ERROR ANALYSIS

Although it is difficult to say with any certainty exactly how close a particular armor model comes to the real thing, since the available data is often too restricted and unreliable to come to definite conclusions, an attempt was made to compare the *ASL* AFV TO KILL results with a very detailed and comprehensive model. During the research for this article, a mathematical model of penetration probabilities was prepared that considered all of the major factors, including hex-by-hex penetration data (in millimeters), random variations in shell penetration and armor hardness, angle of firer to the target (not all shots are at target pointing straight at the firer), and *all* of the armor plates making up the target turret and hull protection (effective thickness in millimeters). The final conclusion to be drawn from the comparison of *ASL* with one of the more involved models of penetration available in wargaming is that the *ASL* armor system, simple as it is, comes remarkably close to the results predicted by the intricate system.

Comparing the 7-12 hex penetration probabilities for a variety of guns versus the PzKpfw IVH frontal armor (turret and hull penetrations were considered in a total result), for example, the *ASL* results for the Soviet 76L and 85L and the American 75 and 57L were found to vary by the following amounts:

PzKpfw IVH Penetration Probabilities after a Frontal Hit:

Weapon	ASL	Model	Variation
U.S. 57L	67%	89%	1-in-4
U.S. 75	55%	50%	1-in-20
Soviet 76L	40%	33%	1-in-14
Soviet 85L	89%	89%	None

The definition of "Variation" in the table above is the probability of different results occurring when one compares the *ASL* one with the more complex model. Since there is a 5% absolute difference between the American 75mm penetration probabilities, on 100 hits there would be five more kills in the *ASL* system than in the elaborate model. A difference of five kills in 100 works out to be "1-in-20". In terms of the average variation between system results, the above figures indicate that different results will occur on one of every twelve hits—which is an acceptable difference considering the limitations of any armor penetration model.

Comparisons for other major AFV (such as the KV-1 Model 42, the Panther, the Tiger E, the IS-2m, and ISU-122) indicate that the *ASL* system will generally differ from any mathematical model on about one out of every fourteen frontal hits (i.e., out of every 14 hits, there will be one occasion—on the average—where *ASL* indicates a different result than the detailed models). With regard to the armor model variants proposed in the article, the revised *ASL* armor ratings (including the IS turret value) were essentially in line with the mathematical model predictions:

Frontal Hit Penetration Probabilities:

Target	Weapon	ASL	Model	Variation
IS-2m	75L	20%	24%	1-in-25
IS-2m	88L	44%	39%	1-in-20
IS-2m	75LL	60%	55%	1-in-20
KV-1 M42	75L	20%	25%	1-in-20
KV-1 M42	88L	57%	54%	1-in-33
KV-1 M42	75LL	89%	83%	1-in-16
Panther	76LL	74%	66%	1-in-12
Panther	85L	5%	2%	1-in-33

Note: The *ASL* prediction is based on the variant armor ratings in the accompanying article where applicable.

Although the IS-2m armor variant was based on some risky assumptions regarding the turret armor that would be hit, the overall result was very consistent with the expectations one has after analyzing the situation from a detailed statistical viewpoint.

One interesting point came out of the KV-1 analysis that sheds some light on the character of "cast" turret armor: although the KV cast turret was 120mm thick on front and sides and rear, German penetration charts versus the turret were based on 108mm effective armor due to their recognition of cast armor strength deficiencies relative to rolled armor. For many tanks carrying cast armor during WWII, the quality of the cast plating was not up to rolled armor, so one inch of cast plate might only be equal to .9 inch of rolled plate, as in the case of the KV turret (if one assumes that the German penetration range data is an accurate assessment of the KV armor). Thus, the effective thickness of the KV-1 M42 turret would rate an AF of 11, all around, if the armor is assumed to match the German predictions of 88L effectiveness versus that tank. (The German *Panzerbeschuesstafel* for the 8.8cm KwK 36, the Tiger E tank gun, indicates that the KV-1 M42 frontal turret armor was equivalent to the earlier KV model turrets within 700 meters in terms of resisting penetration.)

Since the *ASL* and the mathematical models represent separate developments based on widely differing assumptions (the game is, after all, meant as a simple approximation), it came as quite a surprise to see how close the two results were. While the *ASL* results for separate turret and hull penetrations did vary significantly from the more complex model, the overall probability of a frontal penetration was similar; and any dissimilarities in turret and hull tended to cancel out. Thus, the *ASL* system brings results comparable to more complex systems with one-tenth the effort and player involvement, and rates with the best rulesets.

With respect to the overall validity of the *ASL* armor ratings, it is quite a testament to the research effort involved in the design [*thanks to Robert McNamara*] that after intense scrutiny by the author's group of researchers, only two turret ratings (the IS and KV-1 M42) and a few hull figures can be differed with. Whereas the *COI* data required constant updating and additions, it is obvious that *ASL* is here to stay.

between the two areas was determined and related to a two-dice roll system. Representative AF ratings were then computed after slope correction, and the overall results are here offered for use (after a hull front hit on one of the noted AFV, roll two dice and consult the table below for the proper AF rating):

SPLIT ARMOR RATINGS TABLE

Roll	Panther/ Jagd Panther	KV (8)	KV (11)	IS-2m	Tiger II	T43
2	18	11	14	26	26	14
3	18	11	14	26	26	14
4	18	11	14	26	26	14
5	18	11	14	26	26	14
6	18	11	14	26	26	14
7	18	8	11	26	26	14
8	18	8	11	14	18	14
9	14	8	11	14	18	14
10	14	8	11	14	18	11
11	14	8	11	14	18	11
12	14	8	11	14	18	11

* Italicized armor ratings are upgraded on APCR hits, with 26 AF values exceeding 26 (i.e., 26 becomes 33). Non-italicized armor ratings are not affected by APCR hits. "KV (8)" refers to KV tanks with 8 AF front hull armor; "KV (11)" to tanks with 11 AF front hull armor.

Although most of the discussion of split armor ratings has centered on overestimates of armor protection, in the case of the KV vehicles, the *ASL* armor ratings underestimate the protection offered by the drivers plate (upper hull area). The KV-1 presented a frontal hull with 11 AF upper, and 8 AF lower, hull front armor—where the 96mm effective thickness drivers plate qualified for 11 AF designation. The armor was superior to the 50L penetration at 500 meters, 78mm for a TK# of 13, and with an AF of 11 only one out of every 36 hits by the 50L should cause damage.

The split hull armor ratings for the IS-2m will have a major effect on the battlefield vulnerability of this tank. Whereas the Stalin tank hull front was previously immune to penetration by 75L, 75LL, 88L and 88LL hits, with split hull usage of weaker lower hull areas, the hull penetration probabilities change now to 3% (75L), 35% (75LL), 18% (88L) and 42% (88LL).

Wth the use of split hull armor ratngs, the IS-2m frontal hull armor is still a formidable target for panzer weapons, but the hull armor can be defeated when the shot strikes the weaker lower hull area. With regard to the Panther split hull armor, the 14 AF is still a difficult task for guns with a 17 TK# at 2-18 hexes (the Soviet 85L and the American 76L), but guns with more effectiveness against 14 AF will reap significant benefits.

The Stalin Tank Turret Front

As noted at the beginning of this article, the IS series of tanks carried varying degrees of protection on the front of both the turret and hull, offering virtually impenetratable armor next to the plates that were relatively vulnerable. On the IS turret face, 160mm plates with moderate to extreme slopes were married to a gunshield that was fair game for any late war panzer weapon. The problem for us hardcore players then becomes one of determining the proper rating to assign—choosing between an 11 AF value that slightly overestimates vulnerability or the 14 AF value that rules out penetration by the 75L. (A third alternative, a "split turret rating", will not be explored in this article since it is the subject of a further armor study currently under investigation.)

Knowing that the Stalin tank turret front offered the best chance of a penetration to 75L through 128L weapons, on the basis of battlefield experience and analysis of captured tanks, panzer and ATG crews were instructed to aim at the turret center. German battle reports indicate that the tactic of firing at IS tank turret fronts was widely pursued, with many reported kills of Stalin tanks by 75mm penetrations of the gunshield. (One report lists an 88LL penetra-

tion of the Stalin gunshield at 1.61 miles—or 65 *ASL* hexes—on a Nashorn shot, which is surely too far to qualify as a shot "aimed" at the gunshield!)

Since the Stalin tank turret gunshield was the most likely aiming point for shots at the vehicle, and most turret hits would strike near the centerline, it is recommended that players use an 11 AF rating for front turret hits on the IS tanks. While this rating will slightly overestimate the vulnerability of the armor, the results will not be totally lethal to the tank crews. The 75L gun will be able to gain turret front penetrations on 42% of the hits, but the overall 75L kill probability after a frontal hit (hull and turret combined) will only reach 21%. Every 75LL hit against the turret front will kill (and 42% will lead to "brew up"), and the overall probability that a 75LL frontal hit will kill a IS-2m will reach 60%—which is consistent with battlefield reports that indicate how Panthers were often able to defeat IS tanks at close range.

Summary and Conclusions

The choice of a system to depict armor protection is one of the most difficult decisions facing any game designer, since the inclusion of ever greater detail generally leads to longer and more involved playing procedures. With the use of AF rating classes in *ASL*, a high level system has been selected (many tactical wargames do not differentiate between hull and turret armor, but instead use a weighted average of hull and turret or simply present the weaker of the two) and the ensuing detail is quite good. In fact, on the basis of combat resolution time versus realism of results, *ASL* players are using one of the most efficient and compact procedures available in armor miniatures gaming.

With the use of streamlined play mechanics comes a glossing over of some of the detail, which in most cases is limited to factors that have a secondary (or lower) impact on play or cannot be modelled realistically in any event. The loss of detail only becomes of concern when the gameboard chances of an AFV (such as the IS-2m) are clearly affected to a degree that seems too pronounced.

Because exceptions to the rule always occur, even in the most sophisticated and time-consuming game systems, the task facing the designer is to identify and correct the cases that deserve attention. Players will find the *ASL* system more than adequate for most tank hits. The above suggestions are of interest only to the afficionado. After extensive study of the *ASL* armor system mechanics and over a year of experience with the overall game system, it is felt that hard-core players are now ready to absorb a game development that can focus on very limited improvements to selected areas of the simulation. The basic system is complete and will withstand the tests of time; there is only a need to hammer out a few wrinkles.

☆

KREMLIN

In this year of *glasnost* and arms limitation talks, do we really know what goes on in Moscow? Has a thaw come to the Soviet bureaucracy? Now you can take a light-hearted peek over the walls and test the muddy waters of politics in Russia. **KREMLIN**, the definitive, multi-player game of satire and diplomacy for the 1980s is in playtesting at The Avalon Hill Game Company. Watch these pages for our announcement of the availability of 1988's biggest hit.

BACK ISSUES

Only the following back issues of The *GENERAL* remain in stock; price is $3.00 per issue (plus usual shipping and handling charges). Due to the low quantities of some back issues, if ordering please specify alternative selections. Below is a listing of each in-stock back issue by subject matter; game abbreviations are italicized and standard (a partial listing may be found on the "Opponent's Wanted" form on the insert of this issue). Type of article is indicated by the following abbreviations: H—Historical, DN—Designer's Notes, V—Variant, SR—Series Replay, S—Strategy, Q—Questions, P—PBM (postal), Sc-Scenarios, A—Analysis. The featured games for each issue is always the first one listed. Those printed in red indicate one-color reprints of previously out-of-stock issues.

14-3: *AIW*—H, DN, S, Q; *TRC*—S; *3R*—S; *STAL*—SR; *WAS*—V; *PB*—Sc
14-5: *SL*—H, A, DN, Q; *WS&IM*—A; *TRC*—S; *MD*—S; *SST*—S; *3R*—S
15-2: *PL*—V, Sc; *STAL*—V; *3R*—V; *DD*—DN; *RB*—S; *VITP*—S
16-1: *AZ*—Sc, S, DN; *3R*—S; *NP*—S; *PB*—SR; *1776*—S; *DIP*—S
16-4: *MR*—A, V, DN, Q; *COI*—S; *3R*—S; *TRC*—SR
17-4: *FE*—S, P, DN, V; *MD*—V, Q; *COI*—SR; *VITP*—S; *1776*—Sc; *WO*—A; *SST*—V; *NAP*—S
17-5: *CM*—S, V, Q; *RW*—V; *SL*—V; *STAL*—V; *PL*—S; *3R*—S, SR; *CAE*—V; *KM*—S; *MR*—S
17-6: *STAL*—S; *WS&IM*—V, Sc; *WAS*—V; *3R*—SR; *SL*—S; *TLD*—Q; *CL*—S; *VITP*—S; *TRC*—S
18-1: *FITW*—A, Q; *BIS*—S; *SL*—S; *DUNE*—V; *DIP*—S; *AK*—A; *PB*—SR; *AL*—S; *W&P*—S
18-2: *AF*—A, Sc, Q; *AK*—V; *3R*—DN; *TB*—V; *SL*—S, Sc; *AIW*—V; *VITP*—S; *DIP*—S; *DD*—S
18-3: *GOA*—S, DN, V, Q; *AOC*—V, Sc; *AK*—S; *VITP*—V; *SL*—S, Sc; *WS&IM*—SR, P; *DIP*—S
18-4: *GL*—H, V, A, Q; *SL*—Sc, A; *LW*—V; *W&P*—SR; *AOC*—S, P; *FE*—V; *WAS*—S; *AK*—S
18-5: *3R*—S, A, V, DN, Q; *SL*—S, A, Sc; *TRC*—V; *TB*—V; *RW*—V; *CL*—A; *DUNE*—V
18-6: *FT*—A, Sc, V, DN; *VITP*—V, Q; *MD*—S, Q; *SOTN*—A, Q; *SUB*—Sc; *BL*—V
19-1: *SOA*—A, V, DN, SR, Q; *TLD*—A, Q; *3R*—S, Q; *DWTK*—DN; *TB*—A
19-2: *BB*—H, Sc, S, DN; *TLD*—A, Q; *SL*—V; *3R*—S; *SOA*—SR
19-3: *GSL*—A, Sc, V, SR, Q; *DIP*—A; *RW*—Sc; *GE*—V; *1776*—Sc; *LRT*—V, Q; *SL*—A
19-4: *CIV*—A, V, DN; *CM*—V; *DIP*—A; *GL*—V; *AL*—V; *TR*—Sc; *WO*—Sc; *SLA*; *3R*—S, Q
19-5: *SON*—A, S, H, Q; *W&P*—S, Q; *DIP*—A; *WAT*—V; *WS&IM*—Sc; *SL*—A
19-6: *VITP*—PBM, SR; *3R*—V, Q; *DIP*—A; *FT*—V; *BIS*—V; *NW*—A; *SL*—A, Sc; *SUB*—V, Sc
20-1: *GI*—S, A, DN, V, Q; *VITP*—SR
20-2: *TT*—A, DN, S, Q; *MR*—V; *LRH*—A; *SL*—Sc; *W&P*—V; *GOA*—S, Q; *DIP*—A; *PL*—V
20-3: *FRED*—S, V, Sc, Q; *PB*—A; *1776*—Sc; *DWTK*—S, V, Q; *DIP*—A; *CON*—V, S
20-4: *FITG*—S, A, Q; *SST*—PBM, V; *AW*—A; *DUNE*—PBM; *DIP*—A; *SL*—DN, A, Q; *BL*—S; *KM*—S
20-5: *BR*—SR, S, H, Q; *LRT*—S; *DIP*—A; *GSL*—Sc; *GE*—A; *WS&IM*—Sc; *SON*—Q
20-6: *B-17*—A, V, SR, Q; *AF*—V; *LW*—S; *DL*—S; *FE*—S; *DIP*—A; *MD*—S; *BR*—SR; *GOA*—Sc; *SL*—A; *PL*—Q
21-1: *UF*—S, A, SR, DN, Q; *SOA*—S; *GI*—H, S; *TRC*—S; *DD*—S
21-2: *NAB*—S, DN; *W&P*—S, A, Q; *NAP*—S, Q; *DIP*—A; *FR*—S; *FE*—S; *3R*—S; *BFI*—S; *1776*—S; *SL*—A
21-3: *BB*—S, SR, Q; *3R*—S; *SL*—A, H; *SOTN*—V; *DIP*—A; *FRED*—S; *FE*—S, Q; *SST*—S; *TLD*—S; *PL*—Sc; *1776*—Q; *SOA*—Q
21-4: *PGG*—S, SR; *PB*—A; *3R*—S; *TRC*—S, V, Q; *DIP*—A; *STAL*—V, S; *SL*—Sc; *PK*—Q
21-5: *HW*—S, V, A; *MR*—S, Q; *OR*—A; *DIP*—A; *3R*—A; *RB*—S; *CON*—V; *CIV*—S; *SL*—A
21-6: *FP*—H, V, SR; *AIW*—S, Sc; *BL*—V; *TAC*—V, Q; *SL*—A; *PK*—Q
22-1: *PAA*—A, S, Q; *TB*—A, V; *DWTK*—DN; *TR*—V; *GSL*—PBM; *DIP*—A; *AOC*—S; *WAS*—S, Q; *AK*—V; *CIV*—S; *3R*—S, Q
22-2: *BANZ*—A, SR, Q; *FT*—A, S; *SUB*—Sc; *VITP*—S, Q; *AK*—Q
22-3: *PB*—SR; *PL*—Sc, V, Q; *SOA*—S; *DIP*—A; *CIV*—A; *UF*—Sc, Q; *AIW*—S; *GOA*—A, Q; *TLD*—A
22-4: *RF*—A, V, S; *TRC*—V; *PK*—S, Q; *DIP*—A; *3R*—V; *SUB*—V; *PPG*—S
22-5: *DEV*—S, A, Q; *GSL*—Sc; *BR*—S; *DIP*—PBM, A; *SC*—V; *FITG*—A; *ASL*—Sc, Q
22-6: *ASL*—A, Sc, DN, Q; *FP*—Sc; *FE*—S, Q; *WAS*—A; *DIP*—A; *SL*—S; *TLD*—S
23-1: *FL*—A, V; *DL*—V; *B-17*—V, DN; *HW*—S, Q; *VITP*—V; *3R*—S; *TT*—V; *LW*—V; *SST*—V; *RW*—V
23-2: *ASL*—A, S, Sc, Q; *BV*—SR; *UF*—S; *DIP*—A; *PL*—A
23-3: *SUB*—V, Sc; *ASL*—S, Sc; *BV*—SR; *HW*—V, Q; *BL*—V, Q; *BB*—A
23-4: *EIA*—S, DN; *W&P*—V, S; *WS&IM*—Sc; *SC*—V; *NAP*—S; *YS*—S; *3R*—S, Q
23-5: *KOTA*—DN, Sc, Q; *WAT*—V; *B-17*—V, Q; *3R*—S; *RW*—V; *ASL*—S, Sc; *VITP*—S
23-6: *1830*—DN, S, V, Q; *FP*—Sc; *RB*—S; *DEV*—PBM; *CIV*—S; *MR*—S
24-1: *ASL*—S, Sc, Q; *SOF*—V; *TRC*—S; *FP*—Sc; *RF*—S, DN; *PGG*—S
24-2: *ASL*—A, S, Sc, Q; *SOF*—SR; *PL*—S; *3R*—S; *DD*—S; *FE*—S
24-3: *DIP*—S, S, H; *HW*—V; *EIA*—S; *DE*—S; *TV*—Q; *KOTA*—Q
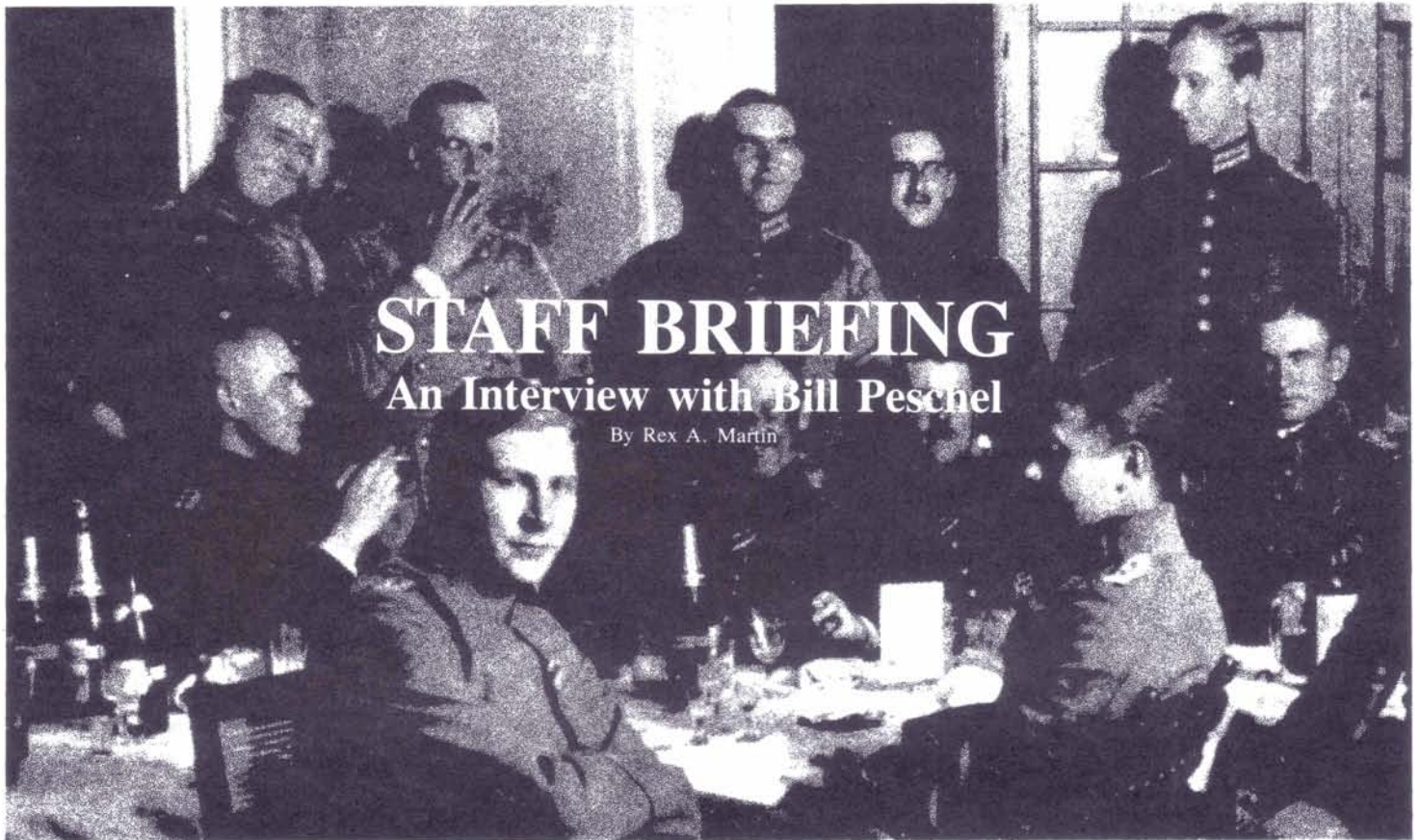
STAFF BRIEFING
An Interview with Bill Peschel
By Rex A. Martin

Q. You're something of an unknown to our readership, Bill. Could you briefly explain your role at The Avalon Hill Game Company?
A. I bear the responsibility for producing the entire line of computer games, from the initial submission to the final product. That involves working with the programmers in developing their games, overseeing the playtesting, and writing the rulebooks. In short, everything with the games except for their marketing and advertising. In that, thank Heaven, I have no authority whatsoever.

Q. Before coming to work for Avalon Hill, you were a reporter. For what paper did you work, and what exactly did you do?
A. That would be at *The Raleigh News & Observer* down in North Carolina. As a general assignment reporter, I covered everything from accidents to elections. It was your basic hackwork, except when the police reporter needed a replacement. Covering murders and other crimes proved more interesting, but the pay was low, the hours long and the work unsavory.

Q. Do you feel that this experience has helped you with the presentation of the computer games?
A. Writing rulebooks and news stories both demand clarity and completeness. It has to convey exactly what you want to express and in the simplest terms possible. Also, struggling through many a boardgame rulebook in my time has taught me a lot of lessons in the art of writing computer game rulebooks.

Q. In your first years with the company, you wore many hats—being editor of the "Victory Insider" and of the fledgling *HEROES* as well as laboring for the Microcomputer Games division. Which task did you find most enjoyable; and which was most difficult?
A. The early days of *HEROES* was certainly the most fulfilling. There was a lot of new things happening with the introduction of our role-playing line and, let's face it, just finding employment after a three-month search was euphoria. *The Insider* was also fun because it brought me into contact with the designers up there, whose work I had been following for awhile.

Working in the computer game division is definitely the most difficult because when I first

came here my only computer experience was with the TRS-80 models I and III, and a bit of Pascal programming. Suddenly I was assisting the then head of the shop and learning a lot about everything at once. It's been a rough passage, but we've managed to do quite a bit in the last four years.

Q. I understand that you are now editing a newsletter devoted to our line of computer games. What is its title, what does it offer the readership, and how can they get it?

A. The newsletter is *On-Line from Avalon Hill* and it is designed to publish the latest news about our products. It's a freebie, and since one can be put together in a day, we can publish them quickly and inexpensively. I hope to use it as a clearinghouse for news and information that would only reach the public in driblets—such as upgrades, questions answered, and announcements about new and potential products. I also hope to discuss works in progress, our publishing and design philosophy, and make the reader more familiar with computers and what we're trying to do. To get a copy, drop us a line and ask to be put on our mailing list.

Q. Do you still play role-playing games? I've never really understood the appeal in such games; maybe you could enlighten me?

A. I don't play as much as I used to, but for awhile there it was pretty intense. Role-playing appeals to many different people. There are the power gamers who just want to ''win'' and are fascinated with images of power. They're the ones who always play the German side in *SQUAD LEADER*. Then there are the dreamers who want to participate in a world where there aren't any complications like earning a weekly paycheck, raising a family or dealing with telemarketers. They'd play *DIPLOMACY* by mail (and send out elaborate press releases as if they were the real Tsar of the Russias).

The really wonderful thing about role-playing is that when done right—and I can't stress the word ''right'' enough—it becomes a very sociable thing to do that doesn't require you to learn a lot of rules. That's my style of role-playing no matter what the game.

Q. Turning to your efforts at Microcomputer Games, you've brought some much-needed guidance and expertise to that division. Recently some truly excellent games have been released for which you oversaw development. Of which are you proudest?

A. Two right now. *UNDER FIRE!* has a lot of neat points to it, and as the IBM version is coming out this year and the Commodore version later, the game's going to be exposed to a much wider audience. The game is a milestone in the company's history. It's complex, but simple in execution. The rulebook is a sucessful experiment in a loose style of writing and contains all those things I wish other rulebooks had, like an interview with the designer. And the IBM version is a fantastic piece of programming. The map looks exactly like the Apple version with fewer colors, and it'll use CGA (standard IBM color graphics mode), monochrome, and ''Hercules'' (a third-party monochrome card that delivers sharper graphics). We're also discussing the possibility of releasing extra unit disks that'll contain infantry and vehicles from other nations than the US, Russia and Germany. It also moves faster than the Apple version. I could go on for hours about this game.

The other game I'm proudest of would have to be *MAC PRO FOOTBALL*—partly because of the enormous amount of time and effort that went into it. The basic game design has remained the same throughout the upgrades, but version 2.0 moves much faster and makes the game more enjoyable.

Q. When you sit down to evaluate a computer game, by what do *you* judge it?

A. By what is already out there, and by whether

or not *I* enjoy it. That's not as unfair as it might sound. First of all, there's no reason to accept less than what the computer is capable of doing, even if the submission is a translation of one of our own games. My own taste in games is pretty eclectic. A game on any subject will interest me so long as the design is good, such as *1830*, *SQUAD LEADER* and *PLATOON*.

It's an accurate adage that there are only a few ways to design a good game, but a lot of ways to do a rotten one. A goodly percentage of the submissions we receive are designed a lot like the early computer games when there was only 16K to work with and limited graphics. What designers need to understand is that, with more memory to work with and very good graphic capabilities, they have to take advantage of them.

Q. Once you have accepted a computer game submission, can you explain the rest of the development process? Do you make extensive use of playtesters, and how do you recruit them?

A. OK—very rarely do we accept a game as is. Usually something's got to be done to it to make it publishable (''Greenwood's First Law of Game Design''). Once the programmer has made the changes, we take it to the playtesters. They're consumers and game buyers who have shown themselves capable of taking a game apart and asking intelligent questions about what's left. After a month's playing, we get their reports and do whatever needs to be done. Each game is different, and problems can arise anywhere. We're always learning more about what the machines can and can't do. After that, it's ''Publication City'' and the thanks of a grateful nation.

Q. What of graphics?

A. If you mean, ''How important are graphics in a game?'', the answer is ''more than most programmers would prefer.'' In books, boardgames or computer games, a professional presentation will sell more than an unprofessional one. Computer gaming is a young medium that is still defining itself. The Commodore 64 is the same machine now as it was four years ago, but it took awhile for programmers to learn what they could do with it, and what looks good and what doesn't.

Q. How hard is it to anticipate the fast-paced evolution of hardware for the computer gaming hobby?

A. It's a lot better than back in 1984 when it seemed like a new machine would roll out with fanfare every month. Nobody—including the manufacturers —had any idea what would fly and what would fail. Which machine do you support and how much? That was our quandry.

After the shakeout, the industry has learned from its mistakes. Now we only have to wonder about the 68000 machines like the Atari ST, Macintosh and Amiga. The Commodore 64/128, Apple II and IBM are strong, so we can afford to experiment with these 68000s. But there's always the nightmare of buying a hot new product and taking a bath on it. We've been more fortunate than others. It's one reason why we were able to survive the shakeout.

Q. One of the trends I've noticed in the products list are modules to expand some of our popular computer games, such as *UNDER FIRE!* and *SUPER SUNDAY* and *STATIS-PRO BASEBALL*. Are there plans for more of these?

A. More and more. We are limited at this point to marketing what the designer gives us. Take John Russo, for example. His work on improving *COMPUTER STATIS PRO BASEBALL* is a marvel. Not only did he improve the graphics of the first edition, but he added some elements to the design that fine-tuned the accuracy of the statistics. I'd love to publish a season disk for every year, but the amount of time he puts into creating one is so great that, at best, he can get us the latest season plus one

additional season only each year.

Q. Looking ahead, what good things do you folk have in store for computer gamers in 1988?

A. More of everything. We're committed to publishing strategy and sports games for the major systems. Expect to see some of the solitaire boardgames make it to the computer; two of them are a definite ''GO'' and two more are possible projects. I can't really give specifics because they haven't reached the point where we're sure they'll be published, except for *COMPUTER AMBUSH* which is being programmed now.

Q. Bill, you know considerably more about the computer market than any of us. What, in your judgment, is the greatest problem facing the computer gaming industry?

A. There is a serious lack of good games which can stand repeated playings. A lot of the software out there are either pure or partially arcade, and that's primarily aimed at children or teens. If someone buys a computer and discovers that fact, his computer may end up on the shelf. Like role-playing games, a home computer could become a toy that you grow out of eventually.

Q. And what do you feel will be the next big advance in that industry?

A. We believe that the market exists for a wider range of true games. There's a need for a game that sets itself up quickly and puts itself away when you're done, and in between all the player would have to do is enjoy it. We can see that with *COMPUTER STATIS PRO BASEBALL, SUPER SUNDAY* and *NBA*. There's no cards and no scoresheets; the computer handles both, and at the end of the game you have all the stats you want. You can run a league using that game. You can create your favorite teams and they'll look as good as the ones with the game. If we can translate that feeling to our historical computer games and others, we'll have a major advance that will directly affect the consumer. All for the better. ☆

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Variations . . . *Cont'd from Page 22*

(441 and 443). While in the Basin, Wynn is immune to Harbor Defensive Fire but not to Dockside Defensive Fire by the green and orange flak guns.

C. *German Jitter Fire*: During the commando raid, the Germans were confused and there were reports of German troops firing upon their own (especially on German troops from other units). If an unmodified ''6'' results from German fire which does not secure a hit on a British unit, the German unit has inflicted casualties upon itself. Reduce its strength by one.

D. *Commando Leadership*: Though all the commando parties were highly trained for the operation, there is no substitute for a leader who can gather remnants into an effective fighting force. When a commando unit loses one or more Strength Points, there is a chance its leader has been killed. After determining the ammo loss (11.8), make a subsequent dice roll. If this dice roll is greater than twice the remaining strength points, the leader has been killed. Place an ''X'' next to the leader's name on the Log Pad to signify KIA. (*Example:* Four strength points remain in Roy; a dice roll greater than ''8'' signifies that Roy himself has been killed.)

D.1 Units with leaders may consolidate with remnant units of the same type (demolition or assault) that are currently without a leader. Such consolidation must occur during the End of Turn Phase (4.9), at the same time that German units consolidate. Remnants must be absorbed in total, and no commando force may ever total more than six strength points. ☆

THE INLAND DEFENSE
The Rundstedt Plan for FORTRESS EUROPA
By Dennis Devine

I suppose that it is inevitable that from time to time the "thoughtless offensive" doctrine will come into vogue and cloud the judgement of otherwise competent strategists. It can happen in real life as well as the area—our area—of wargaming! Take, for example, the years 1914-1918. Didn't matter whether you were on the defensive or offensive, the neat thing was that your side got to attack. Why? Well, as military theorists now will tell you, it comes down to that "all-important" aspect—initiative. With it, perhaps they would have us think, you can do anything. Catch is, you can only get "initiative" by attacking, and you can only keep it by attacking. (Or so the majority would have us believe; such is not the case, but more on that later.) The end result is this overriding concern with attacking and initiative is to bring on such courses of action when it is not really beneficial. Attacking is fine as long as you have 1) the resources and 2) the reason. How does this apply to the game FORTRESS EUROPA? Quite simply, I believe that commonly accepted German play in FE violates both of these. I have observed the Allied machine roll ashore and wreak havoc with German defenses time and again. Pretty soon there is no more to munch on the beachhead and the Allied wave begins to pick up steam. What is so galling is that so many German players then play right into the opponent's hands by throwing themselves on the Allied army when there is really no chance of knocking them back into the sea.

This is not to say that I have not seen the Allies stopped at the beaches. However, unless the Allies have really gambled or the Germans have really done some excellent booby-trapping with the hidden units, the Allied player is rarely pushed off the beaches into the sea—maybe one time in twelve. This in spite of the very common German tactic of an up-front, on-the-beaches type of defense. That leads me to believe that something isn't right here. The "coastal" defense is designed to stop the Allies on the beaches. If it does not do this, the German finds himself over-extended and being slowly (or sometimes not so slowly) ground to pieces. The coastal defense is a *gambling* defense, even when conservative options are taken on the beaches. If the German player doesn't push the Allies off the continent (and chances are, he will not), then the Germans are right where the Allied player wants them.

This haphazard method of defense has been the usual method of German defense since the inception of the game. However, there is another way of doing things. It involves a great deal of planning, a cool hand and steady nerves, emphasis on movement rather than combat, and a cringing disregard for previous German objectives and tactics. This novel idea is not really novel at all. It was favored by Field Marshal Gerd von Rundstedt for the defense of France in 1944. On the surface, it is easy to see why the idea was not popular then, and is overlooked by most FE players today. The plan entails a casual abandonment of the beaches and a fighting retreat through France from the very beginning. To Hitler and his generals like Rommel, this was unthinkable. I find the idea remarkable in creativity and startlingly realistic in terms of resources and objectives. With a few modifications to conform to the limitations of the game's rules, this defense of von Rundstedt will be the subject of this article and its institution as the mode of

German victory will be discussed. I would first like to present the ideas that support the implementation of the inland defense, and then go on to give my views of how this defense should be set up and conducted.

The Theory

Why? Why not! I suppose being a valid German defense is enough reason for some gamers, but for some readers who are more discriminating, there are several more reasons—rather more analytical—for using the inland defense.

The first reason has to do with Allied airpower. As in all games, in FORTRESS EUROPA you must make maximum use of your certainties and put yourself in position to take advantages of uncertainties. Allied command of the air in June is a certainty. The coastal defense calls for the crucial German counterattack during the month when Allied airpower is simply massive (when compared to German strength). This is especially so if four German TAC were used on the June I turn. The disadvantage that this Allied command of the air puts on the German player is very burdensome. German movement is restricted strategically through Allied railroad bombardment and tactically through Allied strafing. German attacks are then conducted in dribblets, usually with a majority of the units being high-quality armor, as these units are mobile enough to get to the action despite air interdiction. These high-quality units are then exposed to Allied attacks with TAC support, attacks that boil away the substance of the German army until nothing is left but a small, crusty residue of infantry and training divisions, scattered and isolated in various towns and/or tied down by game restrictions.

With the inland defense, much of this Allied strength is minimized while German TAC strength is maximized. With the inland defense, German units can retreat out of range of Allied attacks in June, and to some extent in the months ahead. In most games of FE, Allied TAC is used for Ground Support. With the inland defense, there will be few opportunities early in the game for the enemy to utilize Ground Support for there will be few or no targets. This presents quite a different picture to

the German player. No longer does TAC have to be expended to cancel Allied TAC on the Ground Support mission. This in turn is fundamentally significant in terms of the quality and quantity of German TAC expenditure. Allied TAC or SAC countered during railroad or replacement missions preserves German attributes directly, and does not merely promote the status quo as with the cancellation of Allied Ground Support. With the inland defense, German TAC is fighting a much more even battle, largely isolated against Allied SAC. If the German player can plan to keep the need to make long moves (prone to strafing) from arising and, to some extent, can keep his troops as a whole away from the powerful Allied infantry in June, then he has eliminated most of the Allied TAC from the battle—there just is not that much more of value to do. Railroad movement will not be of much value after the first one or two turns, and a good German player will consider it a luxury and not something to be counted on. Bridges near the front will have to be kept standing so Allied units can attack the major German positions that will be established behind each river. Thus, German TAC can concentrate on important things like preserving German replacements—the key to the inland defense.

Overlapping the discussion of the disadvantages placed on the Allied airpower and the enhancement of German airpower is the overall effect of the inland defense on the strength of the German army. In short, the German army strength is hoarded with passion. Territory is sacrificed to preserve this strength, until the point where the German army is *ready* to fight a major battle. Contrary to popular belief, I don't believe the Germans are ready to offer prolonged resistance to the Allied invasion in the first month of the game. Needless casualties are incurred by pursuing this. By keeping German units away from battle, they will not be suffering irreplaceable casualties from TAC-heavy Allied offensives or their own unsupported ground attacks. This plan earns interest on its own value, too. Aside from the positive effects of maintaining the present strength of the German forces, by avoiding the need of expending TAC on battle-related functions German airpower can concentrate almost exclusively on saving German replacements and preserving the
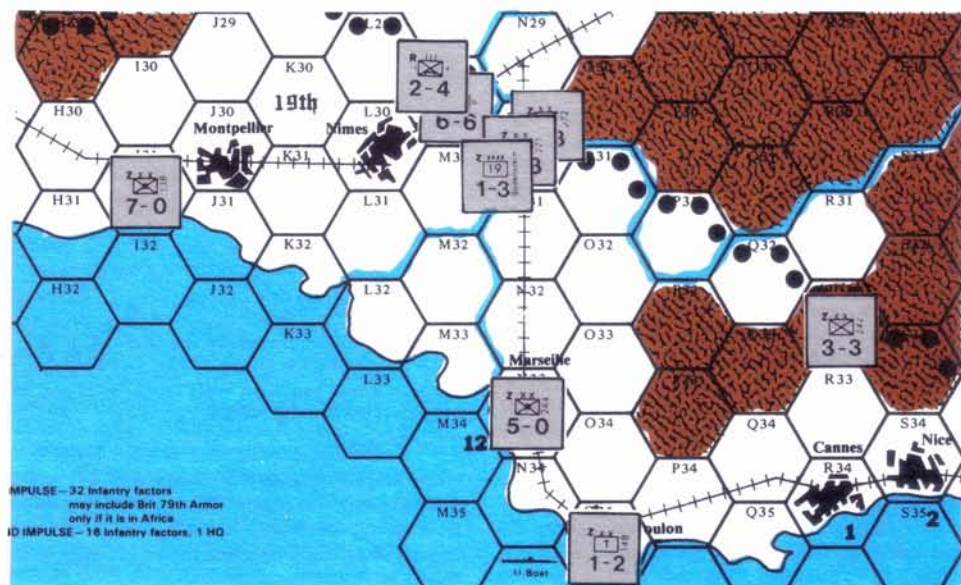

Figure 1: The Rundstedt Plan in the 19th Military District

future strength of the German army. With proper usage, your initial strength will be supplemented by replacements arriving in June that should just about bring every unit up to full strength. Indeed, there may well be a temporary surplus of replacements. These should be saved for use with German HQ units later.

The result of this hoarding of German strength is the yielding of French soil. The elements of time and space are thus called into account. A precarious balance must be struck between these two elements. At a quick glance, the inland defense might seem to be top-heavy in the extreme. However, such is not the case. The inland defense is much more logical in origin. Ground is sacrificed in the beginning, and the fighting is done when the German army is concentrated and a great deal stronger. The coastal defense is more off-balance than this. Under it, German units attack in piecemeal fashion and when they are weak in number and strength in an overall perspective. Then, after having been ground down in bocage fighting, the movement of the German army is conducted while weak and unable to protect itself as it moves to new positions. With the inland defense, the movement is conducted while the German army is strong and growing stronger, and the fighting is done when the army is at its strongest. The inland defense just switches the basics around—the movement comes before the fighting, not the other way around. The end is not the same in this case. The German army will remain a powerful, cohesive factor much longer with the inland defense than with the coastal defense, and will be a truly formidable force when it reaches the West Wall. Now, only this matter of ports remains to be dealt with.

Perhaps the major qualm that most German players have with (or will have with) my inland defense is the blatant abandonment of the large French ports. The idea that extensive German contesting of the ports will hinder Allied planning is a fallacy. If the victory conditions of *FORTRESS EUROPA* was capturing ports, the case for a staunch German defense of the ports could be made. However, under present victory conditions, no time is bought for the German by defense of the ports for the Allies will both capture them and demolish the German army at the same time. The German player is actually helping his opponent by allowing him to do both things simultaneously. The point to be made with the inland defense is that time can be bought by making the Allies do these things separately. With the coastal defense, the number of Allied units in the beachhead is restricted; but, with all that Ground Support available, only so many are needed to attrition the Germans. When the German defenders are broken, the major ports they were holding will fall. Until this time, the Allies could not have used the extra ports/units anyway. This is simply because of the restricted area to operate within the perimeter and the game's stacking limitations. The Allies cannot manage a truly devastating breakout until the German army can be dismissed as an important consideration. Therefore, just when the Allied player can make use of extra units ashore, he will always get them. Contesting the ports merely prohibits the Allies from them when they can't use them anyway—at least use them in any decisive manner.

To summarize then, it takes time for the Allies to capture the ports against the coastal defense, as it will take them time to capture the ports against the inland defense because of the scarcity of special units needed to take the ports due to their fortress status. The net result of the blockbuster port battles of the coastal defense, German attrition, is missed with the inland defense. What is the difference? Perhaps a couple of more weeks of time with the coastal defense method in exchange for sapping the strength of the German army. Is the trade-off a good one? I don't think so. As a final note, one of the game's semi-historical restrictions will definitely help the German player when using the inland defense. Discounting the turn-after-invasion capability of moving ten units by sea, the Allies can only shift five units by sea per turn. Thus, even when the Allied player possesses several big ports right from the start, there will be no appreciable difference than if they had to fight for and capture them over some period of time.

The theory behind the inland defense, in some detail, is to retreat before the Allied invasion when it comes in the 19th, 1st or 7th Military Districts. When the Allies land in one of the two other districts, the game progresses much the same as it would under any defense plan. When the Allies land in the 19th, 1st or 7th, however, the German units of that respective district will retreat out of it—leaving nothing if the district happens to be the 19th or 1st, or a few coastal garrisons in the port fortresses if the 7th. It should be noted that the German player will not leave behind all of his coastal infantry divisions should the invasion come in the 7th District, but will convert some of the stronger ones to regular infantry and retreat them with the rest of the 7th Army. While the Allied player is forced to waste time building up his forces, which will seem and are woefully thin when spread out, the German player will be preparing a major defensive line at the first opportunity just outside of the district. Between the logistical struggle and the mental dilemma over whether to leave the district or amass more strength, the month of June should pass without major fighting.

When the Allied player is ready to advance from the beachhead, probably on his June IV or July I turn, the German player can anticipate this and preempt it by pulling back to a major river line behind the district. This will be the Loire-Seine line if the invaded district is the 1st or 7th, and the Rhone around St. Etienne-Lyons if the 19th has been invaded. There a defensive corps with three divisions of combined arms will form behind each hex of the river line. Released units from other districts will straggle in and form the reserve. July and August are the months of mobility, with pauses at the various north-south river lines for a week or two. The German TAC, at its high point, will use one turn a month to cancel Allied Ground Support (not all of it), and will then concentrate on saving replacements during the other weeks of the month, but definitely using up the available supply of TAC on the third week of the month so that no TAC will be wasted in the event of bad weather on the fourth week.

When September comes, the German army will dig in for an extensive delaying action in front of the West Wall. Reinforcements will have been forming at the West Wall rather than being sent to the front. The main army will break off its delaying action and occupy the West Wall completely by the September IV turn. If things have gone well for the German player in terms of weather or Allied mistakes, then it may be possible to gracefully hold the Allies away from the West Wall for another couple of weeks; given the regularity of chance and human error, this is a likelihood. The West Wall, however, should now be a sight for sore (footsore, that is) German troops. It should be quite a thing of beauty, with each fortress hex filled to stacking limitation with full-strength divisions and perhaps even local reserves in the north where the West Wall falls a little short. With a largely fresh and undamaged German army, the West Wall should hold past the twelfth hour for the Allies.

The Practice

The following section will deal with the recommended set-up for each of the five military districts when using the inland defense, and the specific actions that should be taken for an invasion in the repective districts.

One of the major factors involved in the set-up of the inland defense is attracting the Allies to land at the proper site. One of the problems with the conventional beach defense is the ultimate Allied selection of the worst possible invasion site, from the German point of view. When the German player commits himself to keeping the Allied units off the beaches, he must present the toughest face he can in each and every district if he is to have even a shot at stopping the enemy. Thus, his forces are spread thin almost everywhere and he really only has a chance of kicking the Allied invasion force off dry land with the hidden panzer units, combined with some of the local armor and infantry. This creates the scenario I mentioned before of a quality, but armor-heavy, counterattacking force without much supporting infantry to absorb casualties. The cream of the German army is then exposed and inevitably whittled away in useless battles of attrition.

I have come to the conclusion that the Allies are going to get ashore, and that the best should be made of a bad situation. This amounts to being strong in some places and weak in others. It amounts to establishing some certainties in the face of previous uncertainty. If you give up the optimistic idea of bouncing the Allies off the beaches, you can get down to some realistic planning and some fancy maneuvering. If one doesn't allow himself to be tied to the constraints of an inflexible port defense, it opens up a whole array of options. The ultimate objective is to get the Allies to land where you want them. By making some areas impregnable, or at least unappetizing, areas such as the 15th or Netherlands Military Districts, the German player can almost force the Allied player to land in certain districts. Forewarned is indeed forearmed, and if the German player can anticipate where the Allies will land, he can plan accordingly. The German must lure the Allies by offering ports as bait, in exchange getting the Allied invasion where it can do the least harm to German calculations.

Figure 1 shows the set-up I recommend for the 19th District. If most German commanders had their choice of where they would like to see the Allies land, it would probably be here. The 19th Military District, far to the south and removed from most of the important Allied objectives, would not seem to be high on the list of Allied landing sites. The inland defense aims to make it so. For such a big trap, then, a big piece of cheese is needed to bring a nibble. Therefore, Marseilles will be "sacrificed".

It will be noticed in the illustration that both Marseilles and Toulon are indeed occupied. The coastal defense unit in Marseilles is placed so as to require the Allies to make more than a minor effort to take the port on the first turn. The training division in Toulon is there so that the port will not be entirely open and vulnerable to paratrooper/commando operations in the event that the district is not invaded on June I. Due to the need to land adjacent to each other, Allied units invading near Marseilles will only be able to take that port and possibly Toulon on the first turn—unless the Allied player wants to expend one of his precious paratrooper/commando missions on ports that can be taken without a fight anyway (i.e., Cannes and Nice). If the Allied player does not take Cannes and Nice with paratroopers or commandos, then he will have to divert troops to go back and occupy them, so taking those units out of action for one or possibly two weeks as the 19th Army makes its escape into the Rhone valley. The 7-0 coastal unit in hex I31 is placed so as to be able to head for the hills on the first turn with its comrades. It is placed in I31 simply because that is the only beach hex that is also a rail hex west of Marseilles (where its escape cannot be cut). The rest of the German units are placed so as to be able to flee the district on the first turn. The two weaker infantry divisions east of Marseilles will move behind the Durance River to cover the flank of the German units in the Rhone

valley. The 2-4 unit stacked with the 6-6 panzer will unfreeze the panzer division in the event of an invasion elsewhere and allow it to move off at top speed, whether by rail or tread.

If an invasion does come here, there are several good defensive positions and useful tactics that can be used. The three SS panzer divisions hidden in the center of France will be able to reach the area by June II at the latest. The paratrooper division in Germany can be brought up to strength and flown in, or one from the 7th District can be released and airlifted (not paradropped), preferably to Valence. With any available rail movement, starting on June III infantry should be railed into the upper Rhone Valley. Invasion Reaction infantry can get to the upper Rhone by the end of June, as well as the mechanized infantry division in Stuttgart. The two SS panzer divisions of the Invasion Reaction force, as well as the mechanized infantry division and the Tiger battalions can get to the Lyons area by June II—quicker if any rail transport is available. If things are going poorly, another paratrooper division can be railed in. Finally, by the time the Allies fight their way through the Invasion Reaction force, units that were frozen in other districts will have time to make their way down to the St. Etienne-Lyons region.

The major defensive stance taken by the Germans should be at the Durance River. Unless the Allied player presses right up from the beaches, the Germans should have time to compose a defensive line made up of the four infantry divisions of the 19th Army (including the converted 7-0 coastal division), the 6-6 panzer division, the 2-4 parachute regiment and the 1-3 HQ unit by June I. Arriving at this line on June II should be the 1st and 2nd SS Panzer Divisions from the reserve in central France. The airlifted parachute division should probably be flown in on June I to Valence and then reinforced to full strength. If the Allies leave the district right away, say on June II or III, the short term advantages may be offset by the long term disadvantages for them. By doing so, the Allied player will unfreeze all the German units at a very early time and will risk permanent destruction of some very good French units by attacking with such a high proportion in the front line. In the end, an early exit from the district may put some added pressure on the Germans, but the Allied player risks his offensive grinding to a halt or a defeat in detail. If the Allies do wait (and they probably should), then the German player has time to add ever more reinforcements to the Durance line.

The Germans should stay on the river line (edge of the district) for one turn of Allied attacks and then phase the defensive line back to the Valence area, leaving rearguards to put ZOCs on every hex in the valley and gain time for the Invasion Reaction forces and railed-in panzers and infantry units to arrive. The German should arrive back on the Valence line on about the July I turn. This line should be strongly manned, but remember that it is still only a delaying line. The German player should pause here and hold the line for another turn of Allied attacks, then move on to the St. Etienne-Lyons area for the July III turn. Here is where the buck stops. This region should have been the catch-all net for arriving reinforcements, and the six hexes of this line (running over to the Swiss border) should be occupied by the limit of the stacking restrictions in each hex, with reserves behind the line. If you can make it back to this line by your July IV turn, with only minor losses, you are in good shape to hold this line a month or more.

When the Allies do leave the 19th District, the 1st and 7th Armies should send what reinforcements they can to the area and then pull back what is left to the Seine. Only a coastal division should be left in each port and the rest should be converted to infantry divisions for withdrawal. This withdrawal might tempt the Allies into a paradrop of commando

raid, and it might even bring the second invasion. If it does, the Allied player will have made the wrong decision. If the Allied player is making a truly realistic effort in the south, it will be truly scattered by the time a major build-up is made in the northwest. The second Allied force will have a large vacant area to cross before being of any use, and a high number of TAC units will be necessary to dig the coastal units out of their port fortresses. The division of effort and the dallying with the ports only provides the German player more time to retreat, to pick up reinforcements and replacements, and to make the inland defense all the more effective.

As Figure 2 shows, an invasion in the 1st District is met with the same cowardly reaction. If the invasion comes here, the 1st Army will retreat out of the district and be content with establishing a defensive line on the Loire—ideally suited for major defensive operations. For the lack of efficient landing capability in this area, the invasion force will need a couple of turns to build up in the district. The German 6-0 in La Rochelle will retreat out of the district to Nantes on the first turn as well, because its sacrifice in the fortress will not delay things one bit. The Allied player will probably take the whole month of June to strength his invasion forces. When it comes time to leave, it will be a major error for him to do so in the north. For this reason, the north will be left invitingly open. The 2-3 unit in Nantes and the 1-2 training division in hex F10 (which will move over the river into G10) only serve to protect the 7th Army from a quick blitz which threatens to trap part of it while it is withdrawing to the Seine. An exit in the north would lead the Allies away from the area of ultimate importance, the area containing the German army and the path to Paris and the Rhine, and will lead the Allies in a direction that will make it possible to avoid combat until late July—which could seal things for the Allied player.

This picture I have drawn is accurate because of what the Germans will do after an invasion in the 1st District. The units of the 1st Army, which are set up to be of some aid to the 7th District in the event of an invasion there, will hold behind the river inside the district to prevent the Allies from getting a foothold over the river without having to leave the district, but no other German units will enter the district to support them. The path is left open for the Allied player to snake along the coast up into the 7th District, if he should be so kind as to fall into that trap, and the rest of the German units rally at the Vienne River. The 1st and 2nd SS Panzer can make the river line on the first turn, along with the 352nd Infantry in Rennes. The two assault gun battalions in Britanny each take the place of a frozen unit: one can release the 5-3 infantry in Rennes, the other can replace the 7-6 panzer unit in G8. If you really want to get fancy, you could move the 1-2 training division that starts in F10 up to Rennes and release the other 5-3 division there. The 9th and 10th SS Panzer divisions can be in the general area by June II at the latest, assuming that they take the scenic route. The 1-2 and 1-4 HQs that begin the game in Paris are perfect for moving to R9 and R7, respectively, to free the two 7-6 panzer divisions there. The two hidden armor units in the Netherlands should begin the trip on treads and finish by rail when the opportunity presents itself. Move all available infantry to the area as possible, and don't forget the two panzer divisions (one in the 19th District and one at half-strength in the Netherlands) which are capable of moving if the free units in their respective hexes take their place. It will take a while for these to get where they are going if you have to do it all by road, but you might as well get an early start. This massive force arrives on the Vienne as the Allies are furiously reinforcing and preparing for the battle on the beachhead. It is now the German June III player turn.

How would you like to arise some day and *not* have to go to the bathroom? There are just some things you come to expect in life. The German player defending every square inch of France in *FORTRESS EUROPA* is one of them. But not now. The reaction that I spoke of above may well be that of the Allied player when he sees the Germans packing up and pulling out. Yes, on June III, the German player will surprise everyone by pulling back to the line of the Loire-Seine. Perhaps I have exaggerated a bit, but this maneuver should give the Germans even more time; assuming that the Allies haven't left the district yet, it will take a week of running for even their best-placed units to reach the Loire, and units around Bordeaux or La Rochelle can expect an even longer trip.

This should provide the German player with a bit of time to prepare. This will, in turn, also prevent any major combat for at least the first five weeks. The Germans should take this opportunity to gather replacements. During the month of June, the German player should use his six TAC on the second and third weeks to cancel any and all Allied SAC committed. If there are any German airplanes left over, they should cancel as many Allied SAC on the German replacement mission on the June IV turn. There should be no need for using the TAC for anything else; there will be no combat so there is no need to worry about cancelling Allied aircraft on Bridge or Ground Support missions. Rail transport is important, but it could take quite a bit of the available German strength to protect, as it is open to Allied TAC which up until now would not have had anything else to do. Using the six TAC on protecting German replacements will assure at least four replacements, maybe five; and these should be used to build up the 3-4 parachute division in Germany to full strength, and another infantry replacement should be used to build up the 2-3 infantry in the 7th District to full strength. The two armored replacements should be saved, or perhaps one should go to the half-strength 4-6 in the Netherlands.

Just as the German runs out of TAC for the month, on June III, he retreats out of range. This avoids the potentially dangerous situation where seven Allied TAC could be assembled for use as Ground Support. The Allies will have to spend their June IV turn catching up, and may not even be in position to attack the Loire-Seine on July I. Whether it be July I or July II, however, when the Allies are ready to begin their assault on the defensive positions the German player should take a turn off from protecting replacements and commit three TAC to cancel Allied Ground Support. This will not totally prevent any attacks on such a turn, but it will severely disrupt the turn and may cause the Allied player to make minor repositioning or devote the remaining TAC strength to capturing rear area ports that are still holding out. In any case, on the next two weeks of July, the German should commit three TAC each week for the protection of German replacements. This should bring in another three or four replacements, which should be saved, unless the Allied player has gotten wise and stopped committing SAC to the U-Boat mission. He would then be able to commit four SAC to the German replacements. But many Allied commanders are reluctant to part with half their American replacements, and there is usually enough stuff to keep SAC occupied. If the Allied player does begin allocating four SAC each turn to strike at replacements, then use your TAC in groups to cancel Allied TAC on Ground Support; he will soon get the message, because such action wastes two Allied SAC when there are only two German replacements to cancel. There will be no problem with Allied SAC ganging up on German replacements in June; if he does, it will free the rail net for business—a more immediate threat and one the Allied player will heed most of the time.

In August, the German player should follow the same pattern—one turn disrupting Allied attacks
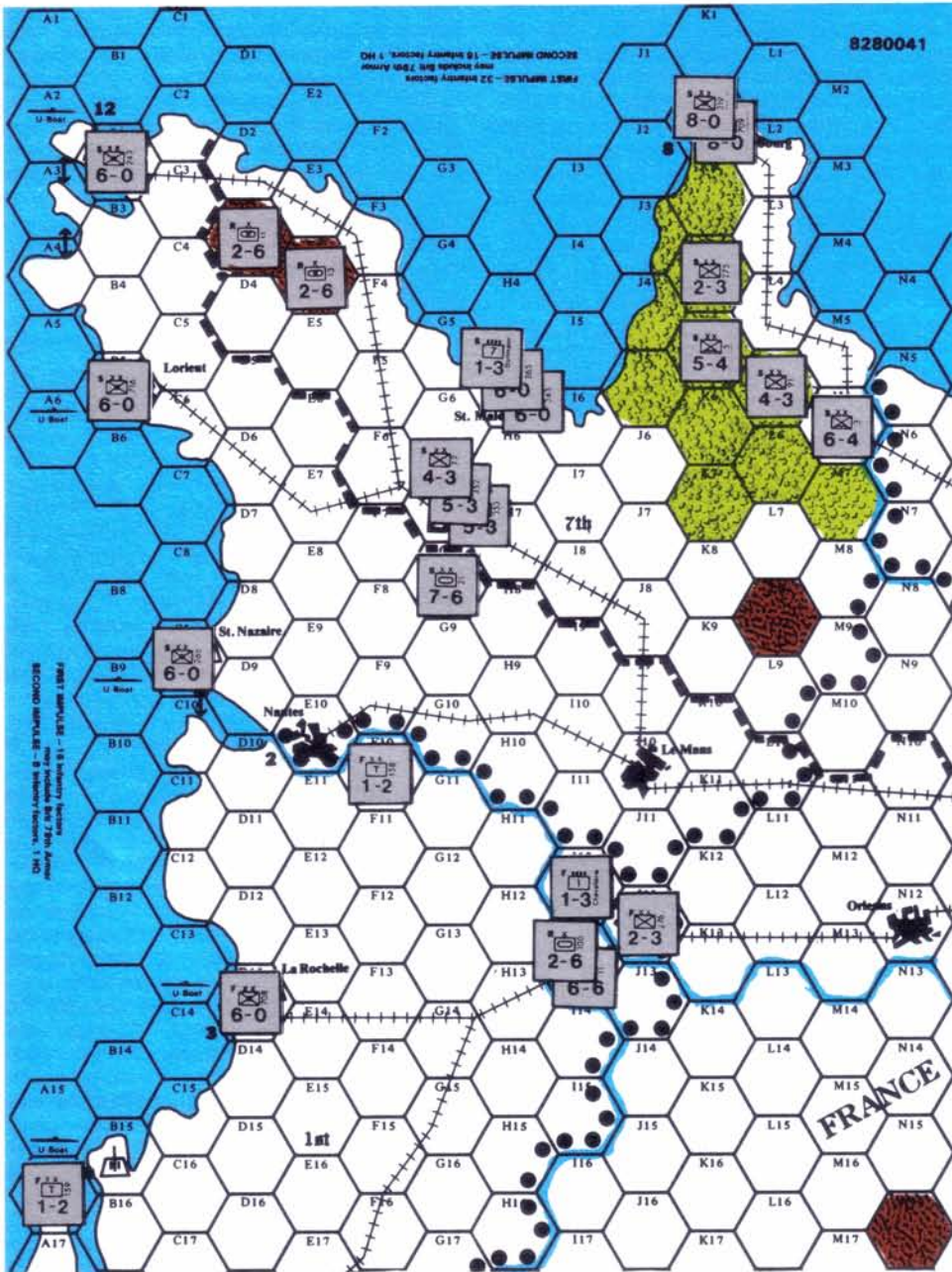
the rear. By August, or maybe even earlier, the 19th Army will arrive to seal the gap between Nancy and Belfort. It should result in the front line running along the Somme to St. Quentin to Reims and then down the Marne.

How long should each river line be held? At the point where it looks like anything more than a local counterattack will be needed to restore the situation, then it is time to move on. Will these river lines really be able to regain some of the lost time that was passed up by skipping the battles of the beachhead; or is this just an overly optimistic portrayal of happenings to keep the logical legs from being knocked out from under my plan? A few quick examples may suffice at this point. In the first three months of *FORTRESS EUROPA*, the Allies have some 36 infantry divisions to work with (counting parachute divisions and taking into account the withdrawals) and 15 armored divisions. The Germans have 30 regular infantry divisions (counting parachute ones), 15 armored divisions, six training divisions that will convert to regular infantry units if not eliminated, and 16 coastal infantry divisions that the inland defenser plans to convert to regular infantry. The German player, then, has the numerical advantage—and is at only a slight disadvantage quality-wise. There are 15 hexes in the defensive line that runs down the Seine to V17, and there are 13 hexes in the line running down the Somme to St. Quentin and along the Marne to X15. In all these positions, at least two-thirds of all troops are in doubled-defense hexes. With the various battalions and HQs, there should be three units in each hex of these lines, and most of them should be multi-step divisions. There should be enough units to provide flank cover, and possibly enough later on to screen the main line from first impulse Allied ground attacks supported from the air.

A common German stack composed of one armored division and two infantry divisions has a combat strength of "15". A common Allied corps of the same unit types has a combat strength of "19". An Allied stack attacking a German stack—1:1 odds, unless your stack occupies one of the hexes with doubled defense, in which case the odds are 1:2. Such attacks are not very conductive to picking up ground or forcing casualties, at least on anybody but the attacker. The burden of the Allied attack must then be carried by the TAC. By allocating six TAC to Ground Support during a turn, the Allied player can bring the odds of two such attacks up to 4:1 (3:1 if attacking across a river). He can manage only two decent attacks a turn, and that concedes all rail movement, German replacements, and the like on such turns. Of course, losses from soak-offs must be considered, and these will most likely be heavy also.

It should be noted that the front line lies on the Somme-Marne on the Sept I turn. While this is where the line naturally tends to form, and where we should be happy enough to find it, this position may cause some concern to players who would consider using the Sudden Death Victory Conditions. To summarize what could be a long analysis, I do not believe that the inland defense will significantly affect the use of the Sudden Death Victory Conditions. While it is true that the inland defense concedes many of the Allied objectives for Sept I, it does not "give them away". It will still take some effort on the part of the Allied player, and this effort is not always beneficial to his game in the overall perspective. Besides, the inland defense allows the German player greater flexibility in his choices, and makes some choices feasible that weren't before. For example, the "nine full-strength armored divisions" option, the "no paradrop" option or the "accumulate five replacements" option cannot

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(much more helpful when the Allied player is attacking river positions) and two turns protecting German replacements. My recommendations are, of course, worst-case scenarios. During the first three months of summer, the Germans can expect two turns of Storm to help them out, possibly giving them a turn of free replacements if the Allied player elects to use his two available SAC for something other than German replacements. Most importantly, Storm will give the hard-pressed German breathing space in terms of Allied pursuit.

Enough about the air game, for the pattern is easily picked up. Now, massing at Loire-Seine (we have returned to early July) is a giant force. Here for roll-call are all five SS panzer divisions, four or five Wehrmacht panzer divisions, two mechanized infantry divisions, and 20-22 infantry divisions: eight from the 7th Army (including one from Cherbourg and one from St. Malo), one reserve parachute division from Germany, one from the 1st Army, two from the Initial Reaction force, two from the 15th Army, the 352nd, and finally seven coastal divisions turned infantry from the 15th District and all the coastal divisions between the Seine and the Somme (except for one to remain in Le Havre). In addition, there should be two Tiger

battalions, assorted training divisions, HQ units and possibly (if you were lucky enough to get them out) the two assault gun battalions from the 7th District.

The area running along the Seine from the sea to Paris will then be held by the converted coastal divisions with a little help from an armored division and a couple of parachute units; the Paris sector will be held in strength by combined arms stacks of one panzer division and two infantry divisions in each hex. Below this, down to Nevers, and possibly a little farther if units of the 19th Army have been able to join the main force, are the rest of the panzers and the mechanized infantry. Any mobile armored battalions should be deployed down here where the river will help to offset their weakness. The mobile units are here for a reason. When the Loire line begins to crack, the panzers and assorted other elements will revolve back with Paris as the hinge to the upper Seine. Delaying units can be dropped off in the passes (R17 and S20) to buy time for the retreat. Units for July and August will form up at this line with help from the Paris-Nancy railroad. Beginning on July IV, a steady stream of repectable reinforcements arrives each week. These units should not be sent to the current front line, but should instead be sent to the next river line to

usually be chosen with any hope of realization in the typical coastal defense. Finally, the line for Sept I is far enough foward to cover most of the Allied options not specifically centered around the western/southern ports.

Appearances are different but the 7th District is set up for a hasty retreat in the event of an Allied landing too. Units in this district will retreat in the face of an invasion to an "observation line" outside the district running down the "N" column with one flank anchored on the sea and the other on the city of Orleans. A division or two, or perhaps the Tiger and/or assault gun battalions along with them, will form a connection with the 1st Army by extending the line at 90 degree angles with Orleans, following the course of the Loire and ending near Tours. Remaining in the district will be one coastal division in Brest, one in St. Malo, one in Cherbourg and one in Lorient. The coastal division in St. Nazaire will make a break for the safety of the 1st District where it will either join the training division in stiffening the flanks of the 7th District or will circle around to join the 7th Army in front of Paris. A coastal division each from St. Malo and Cherbourg will be withdrawn if an invasion comes at a sufficient distance where they will not be picked off in transit to the safety of the rest of the army.

On the first German turn after an invasion in the 7th District, the German player should retreat the 7th Army as fast as possible towards the borders of the district, stopping to form a line where most of the units can gather together and taking advantage of as much doubling terrain as possible to discourage Allied pursuit. He should bring as many other units towards the district in the quickest manner possible and should definitely release the panzer divisions of the 1st, 15th and 19th districts with the units assigned to that task (same ones as in the discussion of the 1st District above). On the turn when the Allied player begins to call in his scattered units, probably out vandalizing ports, and points them now in the direction of the German army, then you must perform your disappearing act and fall back to the Seine-Loire line.

As to my initial set-up, I have tried to make certain regions in the district more attractive than others for an Allied player determined to land there. The Cherbourg region in particular is one that threatens the efficiency of the inland defense, so it is well guarded. The three steps in St. Malo, along with the nearby infantry and armor, may stir Allied fears of the classic "St. Malo SS Panzer Surprise". An invasion at the Brittany peninsula "hinges" will have to move up into the peninsula to capture ports for supply, and will force the Allies to spend a week or two to get sufficient units up in that area to take ports. If the Allied player expends the June II and June III turns getting up to the Brittany ports and June IV and July I bringing them back, and has to use the July II turn catching up with the retreating Germans, he has put himself in a very bad position. All of this time will then have been gained for the small sacrifice of a few coastal divisions and no more. An invasion at the tip of the peninsula near Brest has almost the same disadvantages for the Allies, though not as much time would be wasted.

All in all, this district is not that bad of a spot for the Allied invasion. The big ports will reassure the Allied player's nagging worry that he should be doing "something" with all his spare time. And the ports are actually doing the German a favor by occupying the Allied player's time—for you can just about be sure that Allied troops are not going to leave the district before every possible unit is ashore that he can get ashore. Unlike an invasion in the 1st District, an invasion here also releases sizable German forces right from the start. So an invasion in the 7th District is definitely not the worst possible case for the inland defense.

Figure 3 shows my proposed set-up for the 15th District. In this district, as in the Netherlands, a first turn invasion is handled in conventional fashion. There is no room for defense in depth. However, the setup of the 15th District is one of the most important in the game. Vital considerations here involve how to create a viable defense while still placing units for optimum use if the invasion comes somewhere else.

With the help of a few free set-up units, my 15th Army is in position to respond to an invasion anywhere in the district as well as either of the two western districts. With the conservative but meticulous placement of the hidden panzers, the eastern part of the district is guarded while 15th Army units are placed in the western half of the district. Two 7-6 panzer divisions are placed along the Seine with thought to the almost-certain invasion in the west. The two 4-3 infantry divisions in the towns along the Scheldt can be released by the 1-6 assault gun battalions in the Invasion Reaction force. Of the three possible beaches in the 15th District— Dieppe, the Calais ports, and Ostende—two are suicidal at best. Dieppe has the two panzer divisions; three coastal divisions in Dieppe, two in Le Havre and two in the woods at U6 which guarantee to make things crowded and that is before the hidden panzers and the strong 7th and Netherlands armies get to the scene. Calais has few steps but just too many defending factors to attempt a landing there. Any attack is going to end up scattered and weakened, and is really rather dubious in value given the opportunities extended to the Allies in the west. Antwerp is heavily guarded and units are placed in the Scheldt cities so any invasion at Ostende will take some time to break out and the Allies will only have a couple of hexes to build up before things get really crowded. An invasion here is not workable if the German plays his cards right. The two hidden panzers just outside this district are placed so that they can respond with a maximum of mobility (i.e., no strafing worries) in any direction. The 2nd SS Panzer can get to the river lines in the Netherlands in one turn, and the 1st Panzer in two turns. All in all, you can be 99% sure that the Allies are not going to invade here. Once you don't expect them and are not prepared, however, is when an invasion will surely work.

Figure 3 also shows the set-up for Netherlands District. Compared to congested beach defenses of many a *FORTRESS EUROPA* game, this set-up con-

Figure 3: In the 15th and the Netherlands Districts

cedes Amsterdam but forces the Allies to get a DE at Rotterdam to take it on a first-turn coup. It is obvious that I don't favor trying any heroics on the beaches with hidden units in this district, rather putting them where they can do the most good—in doubled defensive positions on the dykes and behind the Rhine, which is an excellent position to defend from the "swimming-hole terrain" right in front of them to bring any mechanized Allied breakout to a rusting halt. Don't commit too many units here until necessary, and be content to let the Allied player place himself in a bottle if he lands here. All that remains for you to do is put the cap on.

The Aftermath

The Germans should arrive back on the West Wall by the start of October, and should have the line fully manned by the time the last of the initial army arrives. Of the impressive army that began the game, if roughly 66% of the 13 panzer divisions, two mechanized divisions, 30 infantry divisions and 12-15 coastal infantry coverted to regular infantry divisions remain, then the Allies have a truly massive battle awaiting them. Major German reinforcements arrive in the month of September to help cover if there have been heavy losses, and in October to form a reserve behind the West Wall. If the replacement situation has gone well, and losses have been light, it may be possible to get almost all of the major divisions that began the game back in line for the "Battle of the Wall". In any case, German replacements will pick up in September and remain high through December; the discontinuous turns of Allied attack in between turns of waiting on the weather to clear, coupled with the low number of Allied attacks each turn, will keep the German in good shape.

The theory behind the inland defense rests on a solid foundation of certainties rather than the uncertainties of the dice. The German army gains the advantages of mass, terrain (unusable in any positive manner on offense), and handicapped Allied airpower. It will be seen that, if the Allied air game and the accompanying battles of attrition that become possible with it can be disrupted, the resultant rippling effect will be felt through the entire game. It ultimately comes down to one word, "attrition". If the German player can prevent it, he will win. The inland defense aims to do just that.

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AH Philosophy . . . *Cont'd from Page 2*

blind approval of *everything*.

When they discovered my intention of polling customer opinion, the designers of The Avalon Hill Game Company asked that a few of their concerns be voiced as well. The latter part of this 1988 survey carries a number of questions dealing with future game projects. Again, the precepts voiced above hold true for these as well; for example, press-varnished counters and maps might entail a higher price. Please consider your responses as carefully.

Since we don't often have the opportunity to engage in such an exchange of ideas with the war-gaming public, we felt it appropriate to reward you for your time and trouble. Any order of $10.00 or more sent in by 1 August that is accompanied by this survey form completed will be given a $2.00 reduction of the total. This is your chance to not only help us, but perhaps pick up that new game you've been eyeing. The "1988 GENERAL Readers' Survey" is the forerunner of the celebration of our 25th anniversary of continuous publication of The GENERAL—a celebration we'd like to share with you. Hopefully, this offer makes this celebration a bit more joyous.

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Mr. Martin:

I am writing in response to R. Hamel's letter that was published in The *GENERAL* (Vol. 24, No. 1) concerning solitaire ratings. Like him, most of my gaming is played solitaire due to not usually having the time to try and organize a gaming session with other people. To a certain extent I agree with his points about the "Solitaire Suitability" ratings in that they can occasionally be misleading. However, I do NOT agree with his solution of removing the ratings for games that were not specifically designed as solitaire game.

Rather, an attempt should be made to include in the game description on the back of the box the aspects of the game which might enhance or hinder solitaire playing. For example, hidden movement or placement should be mentioned, as should any sort of "double-blind" rules.

But the "Solitaire Suitability" ratings should remain on the back of the box. I realize that it is a subjective rating, and that the ability to play any game solitaire depends greatly on the ability of the player himself. As an example, I, personally, have been able to play a six-player game of *TITAN* as a solitaire game and had a thoroughly wonderful time. Some other games (for example, *FIREPOWER*) are difficult to play solitaire due to the layout of the scenarios (the "Ambush" type, for instance).

Benjamin M. Cohen
Jersey City, New Jersey

★★★★

Dear Rex,

In reply to Mr. Ron Webb's letter, published in The *GENERAL* (Vol. 23, No. 6) about my article "The Lone Wolves" (Vol. 23, No. 3), I must admit that I have some sympathy for Mr. Webb and apologize to those readers who were annoyed by this obvious error. I too am a stickler for accuracy and was upset when I saw it. My manuscript reads " . . . of a lower destructive power than a (reliable) US Mk. 14"—an ambiguous phrase intended to mean that the Mk. 14 was theoretically more lethal if and when it functioned. The poor performance of US torpedoes is, after all, no big secret.

Inefficient proof-reading of the manuscript before I mailed it caused this, and other errors, to get through; and you were then bombarded with corrections both before and after the article was published. The article was also over-ambitious in its aims and very long, containing some game errata, a solitaire movement system, and 35 scenarios. Major surgery was therefore required to give the monster life, and my original phrase became " . . . the reliable . . . ". I attempted to correct this along with other errata in a subsequent letter, but the corrections published in Vol. 23, No. 5 did not include this point—presumably because such an obvious mistake did not warrant the space necessary.

Having said this, methinks Mr. Webb doth protest too much, since the article is about British submarines rather than the American torpedo fiasco, and I suspect that many readers will have spotted the mistake by the overall context of the sentence in which it appeared. Such errors are an unfortunate and occasionally-unavoidable fact of life. My manuscript actually mentioned US torpedo problems and argued that they alone do not explain the early set-backs suffered by American submarines, since attack training was (and still is) accorded a lower priority in the U.S. Navy than in British or German practice. Effectively, a U.S. skipper teaches himself. If Mr. Webb wishes to take these points up with me in more detail privately, I will gladly oblige.

Finally, Mr. Webb is himself in error on some points. A Japanese magnetic detonator *was* taken into service in July 1944, albeit in small numbers, while the trailing "kite" detonator fitted to some Type 92 electric torpedoes was intended to cause the same effect on targets. Nor did Germany give up with magnetic detonators in 1940 as Mr. Webb believes; improved types were in service by November 1943. The best type was used in the T5 and was a metal detector sensitive to even de-magnetized steel. The Italians also produced magnetic warheads of reasonable efficiency, and they were adopted in some German torpedoes too. The Soviets used magnetic pistols on a small scale in the second half of the war, while the later British CCR pistols eliminated many of the faults inherent in the type used at Taranto. For various reasons, these were only used semi-experimentally before 1945.

Charles Markuss
Bolton, England

Letters to the Editor . . .

★★★★★

Dear Rex,

It was a real pleasure to see the *PANZER LEADER* article in Vol. 24, No. 2. This is not only perhaps the fastest-paced tactical game available, but it's also one of the few that can be comfortably played by mail. Unfortunately, Steven Wheeler overlooks some key rules, so several of his suggestions need to be amended.

Bulge: Thrust—Any American expectation of blowing the bridges at St. Athan is wildly optimistic. Scenario special rule #1 forbids the demolition die roll until German units are within five hexes. So at minimum, the German player need only position his units six hexes away and blast the engineers, stuck out in the open on the bridges. To evade the special rule, the engineers can forego bridge demolition and instead create roadblocks at the bridges (rule X.B.2), which would permit a creation die roll regardless of enemy proximity. Unfortunately, the German can interfere with *any* engineer activity on the bridges—demolition or block construction—by means of those seemingly useless 88mm AT guns. The slope outside Wiln (I-6) permits the 88s to gain a clear LOS to both bridges. Together, the two units can achieve 3-1 odds on one engineer platoon, or they can fire separately for a pair of 1-1 attacks. According to rule X.B.1, each dispersal result in combat delays the sequence for engineer activities by one crucial turn, meaning the advancing Germans need not pause outside the scenario special rule radius. In addition, the 88s can fire on spotted units in St. Athan itself, allowing more AFV units to penetrate any gap that results.

Thus, the engineers could create blocks, not on the bridges but in the American rear—specifically, hexes CC-2, CC-9 (which, according to rule V.D.6 prohibits vehicular movement from CC-8), and DD-3. Although DD-3 is open terrain, the engineers can thumb their noses at the 88s because they are one hex out of range! Blocks in these locations leave only four hexes open to rapid travel westward. The "Group B" engineer platoons can fill three of them on the south slope of the hill outside St. Athan, and any convenient vehicle can plug the gap along the tree line at the north map edge.

To gain time for all of this, the Americans can guarantee that no German vehicles can use the forest road. Three wreck markers in a road hex bar entrance to vehicles crossing green hexsides (rules V.D.5 and VI.E). Halftracks and the two M10 units provide the iron. A good location for their demise is in hex N-6, since they threaten German units entering hex M-5 for a clear shot at U.S. delaying units in hilltop hex N-3.

Elsenborn Ridge—As an aside, this must be the greatest scenario ever devised for a tactical game; I've played this one scenario more times than most of the *games* in my collection. Mr. Wheeler's defense seems unorthodox, but the strong appeal of the scenario lies in the manifold ways players may devise their attack and defense plans.

Bastogne: Prelude—Like many other players, Mr. Wheeler overlooks rule XIV.B.4—the side that sets up last must place units either out of enemy LOS or in towns/woods hexes unspotted by enemy units. It is physically impossible for the Germans, setting up first, to set up such that no unit has an LOS to the ridge west of Artain. Hence the Americans, setting up second, cannot place any units in hexes AA-5 or Z-6, the recommended set-up hexes for four platoons of infantry and both batteries of M7s, respectively. With these forces out of the picture on the first turn, the U.S. player has a much tougher time holding onto the town.

Like many players, Mr. Wheeler also overlooks the interaction of two key rules: VI.E (stacking limits to apply at all times) and XIII.A.3 (all vehicular units move before any non-vehicular units). Thus, by initially placing a four-platoon stack on the bridge, no U.S. vehicle may enter the town on the first turn. With reinforcements now two turns' march away, it's probably better for the paratroopers to stack three high in order to let vehicles such as the M5s squeeze across that bridge.

Bastogne: Siege—Mr. Wheeler seems to say that German AA guns can use Opportunity Fire to ambush the L5 aircraft. The "Design Analy-

sis" column in Vol. 12, No. 1 of The *GENERAL* specified that fighter-bombers cannot be attacked by Opportunity Fire—and presumably the same applies to the L5. Similarly, fighter-bombers themselves cannot use Opportunity Fire.

A recent ruling in the "Question Box" may affect the German player's set up of his heavy artillery. Many players, including myself, like to stash the guns in "deep woods"—hexes with all green hexsides and no roads (see, for example, Figure 11 in Vol. 16, No. 3). But in Vol. 22, No. 3, the "Question Box" explicitly stated that a unit may not set up in a hex that it could not enter during play.

Incidentally, despite Mr. Wheeler's suggestion, the use of extra units to dilute indirect fire cannot save the German artillery except under two circumstances: only mortars are firing (highly unlikely), or the targets occupy a town hex (rendering them armored targets). For example, one M7 (AF—40) versus four targets=10 points per target, which is still 4-1 odds against a howitzer or heavy mortar. In a town, the attack strength per target is halved; but then, the American player can simply use two M7 units.

In conclusion, none of the above comments should be interpreted as an attack on either Mr. Wheeler or this type of article in general. "Lessons learned" articles are all too rare in the hobby press, and their appearance should be encouraged.

David Bieksza
Falls Church, Virginia

★★★★★

Dear Rex:

My article "The Empire's Strike Backfires" (Vol. 24, No. 2) was strewn with errors and omissions. That it missed a good final proofread is evident. My own contribution was to forget to show the seventh Spanish 2-3 infantry on Z8, adjacent to Gibraltar, in Figure 8. What a thing to miss; I bet everyone had a good laugh as British armor drives straight from Gibraltar to Madrid. But the article also acquired five more errors as it made its way through otherwise capable hands at The *GENERAL*.

1. It was not I who wrote Mr. Nayyer in the second paragraph; I hope that Mr. *Ali* understands that this glitch must have crept in during the transposition from my submissal to typesetting.

2. Figure 4 should have included a British airbase with two more 5-4 airwings at Buerat. Now the "Airbase Portugal" section makes sense.
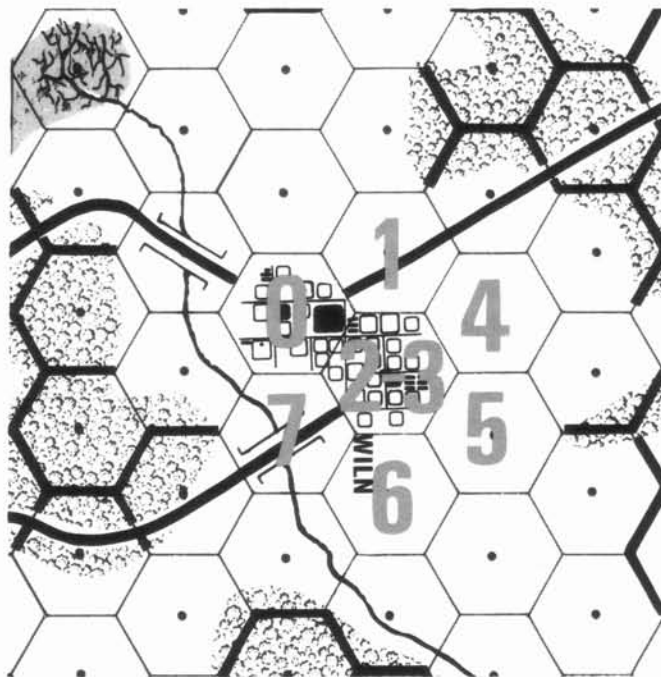
3. In "The 1940 British Budget", next to last sentence should read " . . . the Force Pool must be built *or* Britain gets nowhere."

4. Figures 6, 7 and 8 all should have an Allied Bridgehead counter at T10.

5. In "The Idle Germany", delete the sentence, "Against Mr. Ali's layout, however, the British Army disappears as the panzers pour through Spain into Portugal." It suggests Germany might preempt Britain's attack on Spain with one of her own as a means of catching the British napping in Portugal. But that would not happen, for Britain would be able to block the Germans with the Spanish. In the context of my presentation, such a move would be a grevious German error of strategy.

On another matter, I enjoyed Douglas Chinn's "Storming Fortresses in THIRD REICH" in the same issue. However, I fear he has misinterpreted the loss of Bombardment naval factors on EX results. Rule 29.414 clearly states that the attacker *may* choose to eliminate naval factors. He does not lose any naval factors unless he elects to lose enough to allow attacking ground or air factors to survive. Thus, a 1-3 infantry backed by massive fleet bombardment might be the best against a fortress. Otherwise, Mr. Chinn's article is the best I have read on *THIRD REICH* in these pages in years.

Mark Nixon
Lyndhurst, Ohio

★★★★★

Dear Mr. Martin:

I am delighted that you published "Fighting the Panzer Leader; The Battles of the Bulge" (Vol. 24, No. 2). Should any readers inquire about the Unobserved Bombardment Chart and diagram discussed on page 20, I have included a copy. Sorry for the delay.

Steven Wheeler
Portland, Oregon

In our rush to get this issue finished off before I went on vacation, I made a number of errors. I originally noted that Mr. Wheeler's draft did not have the illustration he referred to enclosed, wrote to him requesting a copy, and then . . . promptly forgot that I needed it to complete the issue. Hence, for those who may have been wondering where "Figure 1" is, we belatedly offer the "Unobserved Bombardment Diagram" below:

Targeting Modifier Chart

Die Roll	Modifier
1	+1
2	−1
3/4	0
5	−1
6	+1

MAN THE BEACHES
Mediterranean Power Play in THIRD REICH
By Mark C. Nixon

Any examination of early war activity in the Mediterranean Theater in *THIRD REICH* must deal with the Italian/Anglo-French positions. It is the most important early war consideration and it all boils down to whether or not the Western Allies try for a double-turn conquest of Italy. The decision to try for it is one for which their initial deployment might open the door, but one which cannot be decided upon until Italy has concluded the Fall 1939 turn. (See Figure 1.)

The amazing thing is that it is so hard for Italy to preclude good chances of a double-turn conquest and so easy for the Allies to initially deploy for the same, that we are probably all remiss for not trying this ploy more often. After all, we are considering an attack which might win the game for the Allies—admittedly at the cost of a large number of BRPs, but many of which are French and, therefore, of transient value at best. I suspect some of the reasons we rarely see an Allied double-turn invasion are: desire to play a "full" game once the decision has been made to play *THIRD REICH* (no one wants to "geek-up" the whole thing after all the effort of setting it up), uncertainty or lack of planning/coordination between the Allied players, and—unfortunately—ignorance of the often high percentage chance of victory posed against a *known* high BRP cost. If more games began with an aggressive Allied deployment, we might then see a great deal more discreet Italian openings.

Ironically, and historically accurate I might add, Italy's best defense against an Allied double-turn conquest (barring a DoW followed by massive German aid or Allied Variant #2) is to do nothing at all! No DoW, no attacks, and *no* builds! If the Allies want to take a double-turn against 150 Axis BRPs, they can't both use Offensive options in Fall of '39. If one makes an offensive, they have only nine BRPs between them for the Fall builds. If neither takes an offensive, they cannot enter Rome in two turns.

Or the Italian player might even build five BRPs worth of troops, still precluding two Allied Fall offensives but allowing the enemy 14 BRP worth of builds. This whole Italian approach is mentioned

only for illustrative purposes. I'll never use it and don't recommend it. Churchill would be frustrated, and anyone employing such a tactic should walk the plank for wasting so much time and Italian BRPs.

No, Italy must do something. Marcus Watney summarized everything to date and explored some entertaining new ground in his article "The Long Road From Rome", which appears in *The Gamer's Guide to THIRD REICH*. If you don't have a copy of the *Guide*, you desperately need to obtain one right away.

Marcus makes an excellent case for Italy's goal of starting 1940 with 100 BRPs, which would allow her to threaten the Allies with a concurrent DoW/Offensive Option. This also happens to fit in well with a "Mediterranean Power Play" strategy. To that end, a Fall '39 Attrition invasion of Yugoslavia is what I find most appealing as the Italian. My point is that Italy can improve her defensive posture to avoid the reservation Marcus voiced regarding an Allied double-turn invasion, and that's the gist of this article.

The ensuing account explores four methods of defending Italy in Fall '39 while a large share of that country's army is involved in Yugoslavia. I've labelled these defenses the "Watney", the "Revised Watney", the "Downing" and the "Combined Watney/Downing". (My apologies in advance to Marcus Watney, whom I've never met but whose *3R* efforts in The *GENERAL* and the *Guide* are always intriguing, and to Bruce Downing, who after ten years of playing by mail remains the toughest opponent anyone could ever hope to encounter.)

One thought strikes me. Anyone confused about Invasion Exploitation from an undefended beach hex adjacent to enemy land unit(s) is entitled to that confusion. Rule 14.4 says you can't, but 29.436 says you can. Once and for all, *undefended beaches are special cases.* Exploitation is possible from an undefended beach hex which has just been invaded, despite the presence of adjacent enemy units, provided all other normal Breakthrough and Exploitation requirements are met. The "Question/Answer" section in the *Guide* helps confirm this. (Should this ruling ever be reversed again, I reserve the right

to once again revise this article. Or maybe it would just be easier for everyone to read it backwards.)

WHAT'S A GOOD DEFENSE?

There are two things to worry about when defending Italy in Fall '39. Most obvious is to ensure that only the toughest possible defense is presented so those bothersome British and French don't entertain any conquest ideas. (That you might opt to use something less than your "best" defense is a concept dealt with toward the end of this article.) Your second major concern hinges on the fact that, to succeed, any Allied double-turn attack must result in the complete conquest of Italy. If Rome is not taken, or is retaken by an Axis counterattack in Winter '39, Britain and France are both in peril from the resultant enemy double turn.

Consequently, any defense which leaves the greatest gamble the Allies face until the second of their two turns is the better defense by virtue of the fact that the Allied players will have already committed themselves to a double turn at the moment of that attack. There is no turning back, as there could be had the great gamble failed on the first turn. This gives us a means for rating any Allied invasion plan, based on which of the two turns they take the greater risk:

#1 Their best attack, when they should seriously consider a double-turn invasion, is when the big gamble occurs on the first turn of battle (such as a 1-1 invasion of W24). Should this gamble be lost, the Allied players can still forego a double turn. They have spent a tremendous amount of BRPs, but have not yet brought an Axis double turn down upon themselves.

#2 Much less inviting is when the "big gamble" occurs on the second turn of the invasion. At this point, the double turn is already in force and the Axis players will counter likewise. Watch out for German reprisals.

#3 Finally, if you go into this escapade counting on holding Rome against anything greater than an Axis 1-2 counterattack, you should consider a switch to playing *RAIL BARON*.

INTERLUDE

Anyone who read the recent article "Like a Thunderbolt" (The GENERAL, Vol. 23, No. 5) may wonder why I have gone so far without mentioning Craig Posey's attack on the Watney Defense. Quite simply, his attack is carried out with several illegal actions. France builds an airbase on Corsica without designating a fleet to supply that island. British 4-5 armor exploits from W24 without a fleet supplying the beachhead. France invades hex AA23 at 3-1, whereas in the *Guide* Mr. Watney showed a 2-3 infantry unit on that beach backed by Italian air (for a French 1-2 attack actually). And, most important of all, Mr. Posey attacks hex X22, a vacant hex adjacent to enemy units and out of supply as well, and *exploits* from that hex with a 4-5 armor which can't legally exploit this turn since it couldn't trace a normal line of supply. That is how he entered Rome—all very illegal. All the Italian player need do to stop Mr. Posey's attack is insist the British play by the rules of the game.

ARE THE FLEETS AT SEA?

Before unlimbering the main armament of this article, I want to make mention of one related Axis tactic which seems to have been overlooked in these pages. That is—where are the German fleets?

Quite simply, if the two German fleets are stationed at a single port on the Western Front, they enjoy a .4861 probability of preventing three British fleets moving together from changing base to Gibraltar. That probability is .6018 against two fleets and a whopping .8101 against one British fleet. Basing at separate ports gives better chances to ensure interception and at least some British naval losses, but less chance for victory at sea. Nevertheless, even in defeat the Kriegsmarine should take a number of enemy ships with it, possibly enough to cancel Britain's Mediterranean plans.

Notice that this allows no room for queasiness in German naval policy. The most important thing this navy can do in the early war is to inflict one naval factor loss on the British. That is, provided Germany doesn't go with "Sealion" and Italy doesn't oblige by inflicting this loss, reducing one British fleet is guaranteed to cause your enemy headaches for years to come. Why? Because even only a single naval factor lost precludes that fleet from "invasion-proofing" a beach/port or SRing anyone. Churchill will be screaming when he learns such minimal damage so drastically hinders an entire fleet.

To set up for maximum British hindrance, the German may face bombardment of his fleet by Dutch and Danish airforces if available, or even by the British or French. The minor air forces are certain to come if available. It's the price you must pay for adding this extra security to Italy. I'm not suggesting the fleets always be deployed in this fashion, merely pointing it out as a tactic to use when you feel the added security is needed (say, against an opponent who has already displayed a proclivity for hitting Italy with a double-turn attack).

For one thing, major air units would require an Offensive Option to attack the German fleet, and so are unlikely to attack unless the Allies are striking elsewhere in the West. To bomb the Kriegsmarine in port, their air units must be located to stage to minor country bases, and so might give away bombardment possibilities in their own set-up. Another important point to remember is that if the British are attacking Italy, they don't have BRPs to spend on a West Front offensive. Therefore, her West Front fleet move must be done as part of an Attrition option since there are enemy fleets stationed on the Western Front—and France must comply with an Attrition. So the Allies cannot bomb the German fleets unless they either begin with all British fleets in the Mediterranean, invade Italy with only those fleets initially placed in the Med, or forego dreams of a double-turn conquest of Italy altogether.

Should Britain elect to avoid the whole problem of transferring fleets, she might begin the war with her entire navy in the Mediterranean. This opening—the "Churchill Dare"—can lead to some

Figure 1: Both Britain and France threaten invasion. French fleets at Marseilles can provide supply for both nations. Not shown are the British forces stationed at Gibraltar: 4-5, 3-4, two 9-factor fleets, and a 1-4 air. Three British fleets in England await sailing orders to Gibraltar.

wild play, often featuring a first turn German invasion of England. Germany takes a gamble, but either way the Royal Navy usually sails from Gibraltar to fight, axing her chances of invading Italy unless the Interception roll is a "Miss" (in which case everybody returns to Gibraltar for orders, which will likely see them shuttling WDF units to the home islands). In this scenario, Britain can take two turns to kick the German out of England; when the smoke clears, it's anybody's guess who has the upper hand. If the original British interception was successful, British Fall builds are stranded on the island.

Finally, should three British fleets manage to change base to Gibraltar, at least one Gibraltar-based fleet must then relocate to another Med port. That fleet can be intercepted, although I prefer to hold the Italian navy until the full invasion force is committed. Too much dispersal usually allows too much chance for French fleet maneuvers. (Refer to Figure 1.)

DEFENDING THE HOMELAND— OPTIONS

Whether or not you have the *3R Guide* at hand, I have reprinted the Watney Defense of Italy (Figure 2). This is the defense after Attrition failure in Yugoslavia. Also shown is the Revised Watney Defense, my refinement of what Marcus presented. Reasons for the changes will become evident through the course of this article.

The Downing Defense (Figure 4) is quite different from Marcus Watney's. Six units in northern Italy have been replaced by one 2-5 armor, and the beach at W24 is directly held. If Britain transports units through Marseilles, nails the 2-5 and tries to exploit in Fall '39, he gets no further than U23. This frees five units to surround Rome with a double line, forcing an Allied invasion if Rome is to be contested.

Finally, I present the Combined Watney/Downing Defense (Figure 5) featuring pretty much an even split of these two approaches. What follows is an explanation of various strengths and weaknesses of these defenses of Italy, taken one by one.

THE WATNEY DEFENSE

Strengths: Overland conquest of Rome impossible.
Forces a 1-1 (an Exchange works for the Allies) attack on the second turn of invasion.

Weaknesses: Rome could fall to attacks from any of three beaches at no worse than 1-1 odds.
Some Italian fleets have been used.
Libya has been weakened.
Italian air power is dispersed, and susceptible to attack from Yugoslavian air forces.

Mr. Watney properly identifies W24 as Britain's choice for "Best Bloody Beach on the Boot". His decision to not defend the beach directly is intriguing, relying on Allied inability to knock defenders out of X23 in both the Fall exploitation and Winter attacks. He appears to delay the Allied "big gamble" until Winter '39, when they must hit X23 with a 1-1 odds attack. They better succeed or they're cooked!

Unfortunately, the big gamble actually occurs at sea against the Italian navy, as everything that happens after the troops land free at W24 is as certain as an 83% shot at X23. Read that an 83% chance to win the war! Were Churchill here, he would go for it every time.

But Marcus gives the Allies too much credit. Due to Anglo/French cooperation limits, they cannot accumulate Winter air superiority of ten factors over X23 merely by invading W24 in the autumn, be-

cause in the winter Italian air could then be counteraired from W24. With British ground forces there, that counterair could only be performed by British air. The attack on X23 would go off with five more British air factors intercepting the remaining Italian air factors. Since French air units could not then join in the attack over X23 (British air would be intercepting in the hex), a maximum of only six more British factors (four built in the fall and one each from Malta and Gibraltar) could have SRed and staged within range to provide ground support in that hex. The two factors in Egypt had no way to join in this, as Fall SRs were performed with no fleets available. The British might have saved a fleet to SR these air units within striking distance, but that would have dramatically increased Italian likelihood of a naval victory and so is not considered here.

So Marcus actually has Britain hitting hex X23 with a maximum 13-12 or 13-15 attack, depending on which Italian units are defending. The British player probably wouldn't invade in the first place to deliver such an attack.

But, if in the Fall the Allies designate a French fleet to supply Corsica and the invasion hex, they can make an exploitation attack on W23 or a combination attack on W23, V24 and/or X24 to clear out defenders there. No airbase can be built in these hexes since they cannot be supplied due to the Italian armor in X23; but in the winter British troops can now all move out of W24, permitting construction of a French airbase there followed by a French airwing staging in to counterair an Italian air unit. Supply to the beachhead must be provided by a French fleet.

Notice the Allies have all sorts of nasty options they can perform with the ten French air available to support autumn exploitation attacks. Should Italy throw around any DAS, she is limited to three times the *basic* defense strength in each hex and thus exposes her air units to some painful interception possibilities. If French air nails enough Italian air in this manner, she might resolve the whole problem of winter counterair right here and now, well ahead of schedule.

The kicker here is that both V24 and W23 might fall to an Allied player cagey enough to set the ploy up, and demands an Italian player lax enough to miss the danger. With 4-5 armor at W24 and six French air flying ground support over V24, it appears the Allies have a 5-1 attack (with four air factors held back to intercept the maximum three Italian DAS allowed). But if, in face of these odds the Italian player does nothing or even flies three air over V24, that air gets intercepted and the attack goes off at only 2-1 against both V24 and W23. The Italian should also have flown three air over W23 or, better still, flown no air units at all in hopes that French air losses in an Exchange could not be rebuilt for winter.

This method of attack—the "Straight Fake-Out"—is the number one method to employ the mechanics of the air rules to destroy your opponent. He'll go nuts second guessing. To avoid counterair from a single French airwing flying out of W24, which is the key to this whole Allied attack, Italy can base both her airwings in one hex. Ramifications of that, her best strategy, are examined later in the following section.

Otherwise, yet another option is open to the Allied players. They *can* combine Anglo/French air in one attack (horrors!) provided they attack two hexes at once. So, in the Fall '39, the British attack V24 by exploitation and advance the 4-5 armor. In winter, the 4-5 takes Venice, U24, Florence, Livorno and ends in X22—the Limeys culturally much enhanced for their effort. The 3-4 infantry unit is still in W24 with the 2-5 WDF and a newly-formed British airwing (from the 1-4 Malta and 1-4 Gibraltar, plus the three autumn builds). The French 5-4 at Ajaccio stages to Sarajevo; British 5-4s at Toulouse and

Lyon stage into Ajaccio and build an airbase. All Italian air gets counteraired from W24 and Sarajevo. Ten British air factor hit X23 and two French factors hit W23. Now the attack is 19-15. If Attrition in Yugoslavia allowed a 3-3 to SR into X23 during the fall, five French air fly in to make it a 22-18 attack and Rome falls on any result but "A". Churchill (to mention the great man one last time) would be pleased; with this kind of cooperation Britain and France might have built the tunnel by now. Notice that even two more French air are usually available for use in northern Italy, as only three need stage to Sarajevo where—with instantaneous intervention—they pick up those two Yugoslav factors for their counterair on the Italian 5-4 at Z24.

This attack certainly has its pitfalls. Fall French air losses must be replaced, but only so far as they might exceed Italian losses. Any excess which can be rebuilt with France's 13 available BRPs will come in useful for defending the northern French line in Italy, or French units in France. Unfortunately for the French player, she also needs to build the two 3-5 armor units in order to secure the north line so her air losses might actually end the conquest of Italy prematurely. But at least it would be realized in time to cancel the double move.

Marcus ended his discussion of a successful British invasion with Rome conquered and awaiting a German onslaught from the north. He did not comment on any counter measures the Allies might take to prevent a German reconquest—yet this is the first true test of any Allied plan to take the capital. That is, it is not too terribly difficult to get into Rome against the Watney Defense (once we start allowing 1-1 attacks as acceptable most anyone can stumble in); but only a plan which provides the means to hold the city against counterattack is worth considering.

This is the real reason any invasion south of the city is a poor choice for the Allies. They simply will not be able to screen Rome from counterattack from the north. Unless enemy deployment is extremely lax (so that you can catch them offguard), almost any conquest of Rome from the south is doomed to ultimate failure. That's not to say there isn't plenty to be gained by invading there. Rome may or may not fall, and the double turn may or may not be taken. Such a limited objective will not be considered in this article, however.

To protect her ally in occupied Rome, French troops must be busy in northern Italy. By attacking the Watney Italian front line in Fall '39 and massing her army during Build and SR phases, France is able to place armored units at T24 by the end of winter. Some French air units might even be available to assist in these exploits if not needed further south. There, Britain could conquer Rome by attacking only one hex—X23!

To protect the Italian defense line in northern Italy, German air based in Berchtesgaden and Munich seem ideally placed. Unfortunately, your German ally will quickly remind you that these bases are in reach of Strasbourg and of a French player seeking opportunity to spend BRPs in a normal Fall turn to preclude any double-turn. Consequently, you will have to be satisfied with the five factors at Graz. Don't expect the German player to provide an airbase to defend against an Allied invasion of such dubious merit. After all, the German would probably like nothing better than just such an Allied gambit.

My Figure 6 shows the situation after the Allied Winter '39 SR Phase. Clearly, Axis units cannot enter Rome overland. The best they can do is to transport to Spezia or Naples, but six British fleets are available to intercept, as are two French fleets. One ally intercepts any Italian fleet base changes, the other intercepts the transport mission. Note that one Italian fleet may be needed to supply the target port and that additional Allied units could be brought through Venice and Livorno if desired. Finally,

Germany should have been convinced to supply a full five-factor airwing in Graz. Even if three of those factors have flown in the fall, at least they will be available in the winter to help deter the French in the north. All Germans in southern Germany in range of Rome must be considered part of the counterattacking forces. Should this force grow too large, an alert Anglo/French combine might even spot a better opportunity for a Western Front double-turn attack against Germany herself. That potential is always present.

The Southern Approach

With Sicily defended by a 2-3 in Messina, French air able to stage to Tunis/Bizerte allows the Allies to intercept Italy's allowable six factors of DAS, lend four factors of ground support to the 4-5 armor attacking from EE20 and hit Messina at 2-1 odds. One French fleet provides supply for this undertaking and the other two SR two French armor units to Messina; the 4-5 goes back to Syracuse. In the winter, the third French 3-5 is transported to Messina by two French fleets with British fleets available to intercept any threat. The French player hits empty hex Y25 and exploits into Rome. British armor chases enemy fleets out of Brindisi and Taranto.

This attack does nothing to stop a German counterattack from the north; it therefore has a very limited practical application. A contributing limitation is the fact that French air units must start no further north than Marseilles in order to stage into Tunis or Bizerte.

But two important facts are driven home. With the right set-up, the Allies can take Rome from any beach they want and can use French fleets to provide supply, intercept the Italian fleet, transport or SR units to the focus of attack. Because the French units in Europe must draw supply from Paris (27.28), British fleets may not carry supply to Syracuse and Messina if French armor is to SR there (see the Question section in the *Guide*).

Simply consider one scenario in which Germany does not take Warsaw in the Fall '39 turn (it happens in about three of every 100 games) and is faced with rebuilding her army, defending in the West, and conquering Poland in winter. Little or no provision might remain for aid to Italy. That country might have to face the Allies alone! In that case, the southern route to Rome might be the best. Coupled with intervention in Yugoslavia and winter conquest of Belgium-Luxembourg, the Western Allies might prevent an Axis double turn even if Rome is retaken. But that unlikely event need not be explored in detail here.

The Beach at AA23

Marcus defends this beach with only two factors. He mistakenly suggests that they are backed by ten Italian air factors, whereas they can employ only six—for a total defense strength of 12. Britain can attack it at 1-1 odds.

Note too, Mr. Watney's idle statement that British fleets are "risked" is misleading. Britain does not risk her fleets in the actual invasion attack because they do not sink even with the worst possible result. The Admiral gets to choose. There is no risk at all. Only the Italian navy or bombarding airforce can inflict losses on His Majesty's Navy.

One final bone to pick is with Marcus' referal to the "Italian player choosing to hold back his airpower" if the 2-5 WDF is not held back to exploit to Naples and Cassino. Such is not the case, as that Italian air must be committed to DAS prior to commitment of the 2-5.

THE REVISED WATNEY DEFENSE

Strengths: Overland conquest of Rome impossible.

Forces a 1-1 attack on the second turn of invasion.

Weaknesses: Rome can fall to an attack from W24 at 1-1 odds (an Exchange saves Rome).

As important as anything else, the Revised Watney highlights improved air and naval positions. These are also vital elements of both the Downing and the Watney-Downing defenses. As such, they are covered in detail below in this section.

Because Britain needs hexes V24 and W23 to link up with the French army conquering northern Italy, it is vital that the Italian player try to keep them out of these hexes. Therefore, relocation of a 2-3 from X24 to W23. Taking only V24 does not allow British ground units on W24 to move off in the winter and still attack X23. So that move nullifies one clever ploy to bring French air units into the picture. Taking on W23 will get those ground units off the beach in the winter, but now the 4-5 starting in W23 cannot conquer Venice or hex U24, which extinguishes Allied hopes of SRing defensive help through northern Italy. In this case, the Allies may be in serious trouble if they hope to obtain a 1-1 attack at X23.

But they can always attack X23 and either V24 or W23 in tandem, using French air over one hex and British air over the other. The 2-3 in W23 makes this tougher than in the Watney Defense, but it's still possible. Italian air can defend V24 with only three factors, so if that hex is involved in the attack the Allies enjoy the tremendous advantage of knowing that the Italian air force must be in X23 in strength—or remain at their bases.

Messina

As Marcus stated, a single unit secures the southern approaches. However, that unit should not be at Messina (as in the Watney) but at D22 where it is tripled on defense and out of reach of French air based at Bizerte/Tunis. Britain cannot easily attack with five air factors from Malta in the fall, as the war must begin with only one factor of airpower on that island. Additional air units might be transported in, but would be susceptible to interception (and use of fleets to transport these would weaken the invasion task force itself). Further, with ten Italian air available, it matters little. Six factors fly DAS and Britain's best shot at DD22 is only at 1-2 odds.

Italian Air—Where?

There are a few other major refinements over the Watney Defense. Notice that both Italian air units are in Naples. They must be able to protect W24, DD22 and AA23. The reason for not putting one in Taranto is because there it could be hit by Anglo/French air flying from beachheads at Syracuse or W26. Had he put that airbase in Naples, Allied air flying from W26 to counterair would be in bad shape due to challenging a force twice its size. Notice that both air units could also be placed in Taranto. This way they avoid any counterair from V24.

But the biggest worry about basing anywhere but Naples or Taranto (and you may laugh) is Yugoslavia's airpower and her airbases. Imagine your embarrassment if Yugoslavia's air flies out of Sarajevo and nails an Italian 5-4 in Taranto or Z24. This is a mistake akin to leaving a used German 5-4 airwing in Kolberg at the beginning of the game and giving the Danish air force a chance to hit it with a −1 modifier only. Here however, if it permits Britain to land an invasion, it could be more than a mere embarrassment. It could be the game.

Yugoslavia would not come away from this battle in shame. She has a .9166 probability of harming Italy and, the real kicker, does not spend that hated 15 BRPs for an Offensive option. To add icing to the cake, since she is, at this time, a newly invaded

Minor (nobody has intervened yet), she takes her best shot at the Italian air force before the Western Allies even have to take action. They can sit back and watch and judge the results. It's not often that one can enjoy a luxury like that in this game.

Yugoslavia's odds of doing some good against an Italian 5-4 airwing are: one chance of total victory (win battle and Italy loses a factor); two chances of a tie, possibly her best result because the ensuing die roll may actually kill off two Italian air factors and grounds the balance of the airwing; thirty chances of losing both factors and killing one Italian factor; and three chances of losing one factor and doing nothing to the Italian air unit. Notice that the Yugoslav air cannot hit the Germans in Graz as Yugoslavia is not at war with Germany during her turn.

Once the Italian player adopts the practice of basing her airwings together, they can't be hit at Naples; and if based together at Taranto, Yugoslavia's only possible counterair result would be loss of both factors and loss of a single Italian factor. But even this can help the Allies tremendously, as any diminishing of the Italian air force saves the Allies that same amount of air.

Also, Yugoslavia can bombard the Italian navy at either Durazzo, Brindisi or Taranto. Unless there's only one fleet in Taranto, Durazzo and Brindisi are the best targets for it, because reducing one of these fleets guarantees you are damaging one of the fleets which will intercept the invasion force. The ramifications of a "cheap" shot such as this are twofold. A nine-factor fleet reduced to seven factors has only the possibility of taking out three British fleet factors (one Shore Bombardment factor) instead of four fleet factors (or two Shore Bombardment factors). A reduced fleet couple with other full fleets does not increase the total amount of naval factors eliminated in a naval engagement. That is, combined nine- and eight-factor fleets lose only the difference of the dice, not double the difference as would two full fleets. Thus, British naval losses would be less, accordingly allowing more of them to hit the beach. Thank you, Yugoslavia!

Note too that, if the Allies intervene and take a double turn, Yugoslavia will take her winter turn in conjunction with them, giving her a double turn against Italy as well. Something to think about.

To offset the Italian air force ganging up in Taranto, France can try to invade Syracuse or hex W26 for the express purpose of building an airbase there and counterairing those enemy units in Winter '39, in conjunction with other French air units in W24. This may draw Italy's navy into that engagement with the French fleets we Allied players all hope for. Effecting this naval showdown may be all the Allies need to make the whole gamble worthwhile. Whether or not France actually takes Syracuse, the Italian navy has been damaged, possibly even mangled beyond repair. The awesome amount of BRPs spent to force this naval battle may prove well invested in the long run.

Alternately, France could stage a 5-4 to Sarajevo to help counterair Taranto! Other Yugoslav bases are likely to be available, as Yugoslavia need not always use the standard set-up Marcus described in the *Guide*.

In fact, the importance of Sarajevo begins to make it look worth taking as Italy's Fall attrition choice. For that matter, it may be that the best Yugoslav defense is one which intentionally allows an Italian 1-1 attack at Belgrade in the Fall. Should Italy try it, she allows use of French ground support at W24 since her own air has been used against Belgrade and, therefore, does not require counterair or interception contingencies. Italy might lose the 1-1 at Belgrade, and even if she wins it she cannot SR everyone out for home defense. Since she has spent 25 BRPs on the DoW and Offensive option, she now has only 12 to spend on Fall builds in lieu of the normal 22. Notice too that any Exchange losses will

Figure 2: Defense following Attrition failure in Yugoslavia is shown, per Mr. Watney in the *3R Gamer's Guide*. Note that there is also an Italian fleet in Tobruk and a 1-3 infantry in II15. With Attrition success, one 3-3 at V27 replaces the 2-3 there, which then moves to W23.

further weaken her armed strength against an Allied double-turn attack.

Help for the Navy

Another major refinement over the Watney is docking space for Italy's navy. Marcus completely overlooked the Adriatic gateway cities—Brindisi and Durazzo. With fleets in each of these ports, any invasion headed for W24 is intercepted automatically. What's more, France cannot intercept the hex where Italian and British fleets are doing battle! This means that at least one British fleet will be reduced. Who says that Albania is not vital to the Italian war effort.

Two fleets sit in Taranto to foil that wild Yugoslav air bombarding a single fleet in port as a means of opening the beach for a winter British invasion (Marcus missed this one too). Taranto simply should never fall to such a "cheap" attack. The Italian fleets are positioned to intercept the British navy, but should never be needed for such action. They really don't want to be counter-intercepted by the mad French, nor can they afford defeat by the British. These are too valuable later on to risk where they may not be needed anyway. The point of the whole undertaking is to scare off the Allies, not to actually see action. But if the enemy comes, the fleets sail!

In fact, in one of those wonderful anomalies of this game, interception by more than one Italian fleet is the only way the British invasion force could skate through unscathed and hit the beach without fear of a 1-1 Exchange result eliminating their last chance of taking Rome. To understand this, consider the naval odds:

1. six British vs. one Italian fleet = +6 and −1 modifiers.
   Best Allied modified rolls would be "7" British and "5" Italian.
   Italy loses two factors; Britain loses one.

2. six British vs. two Italian fleets = +5 and −1 modifiers.
   Best Allied modified rolls would be "6" British and "5" Italian.

Italy loses two factors; Britain loses one.

Now, there is only .0277 probability of the second occurrence, and it appears the same as the first, but only because Italian losses are doubled due to the presence of 18 fleet factors. If, however, one of those Italian fleets were reduced by French intervention or Yugoslav bombardment, the losses against Britain's navy would be one Italian factor (and no British factors), since the result is no longer doubled. Thus, in this situation, Italian potential to "do better" against the enemy fleets actually allows the chance for a worse possible result.

Libya

I do not recommend weakening the Italian position in Libya any more so than it already is at the start of the game. That situation is already so tenuous the Allies can conquer Libya with very little effort. Stealing away one of the defending 1-3s, as in the Watney Defense, not only wastes an Italian fleet on the one turn of the game it is absolutely vital that Italy preserve fleet integrity, it also permits Allied conquest of the colony without a fight.

If the Italian player knows he will not be declaring war on the Allies in Fall '39, his Libian contingent might set-up in only the least threatening hexes, as a means of lulling the Allies into a passive stance in the desert. The 1-3s in LL15 and MM21 can move up to the frontier, but not beyond it. You are showing the enemy you have no hostile intentions. He may accept that and himself set up only a 1-3 in LL25 and nobody on the Tunisian border. Neither Britain nor France would be able to take their respective objectives of Tobruk and Tripoli on the first turn of any invasion.

If the Allies respond with threatening forces on the frontiers, you have at least succeeded in drawing their attention away from the main arena of conflict and can respond accordingly. If they have actually placed armor in the desert, off the ports, you can consider the invasion of Italy a dead subject.

THE DOWNING DEFENSE

Strengths: Overland conquest of Rome impossible.
Forces 1-1 attack at W24, with only

Figure 3: This is the "Watney" with a few areas cleaned up to make things tougher for the Allies, while still maintaining the basic premise of not defending the W24 beach directly. Note that two German fleets are in Bremen, and an Italian 1-3 in II15.

a slim chance that even that can be delivered.

Weaknesses: Exchange at W24 in Fall coupled with a Winter combined attack can allow French Exploitation into Rome. Defending northern Italy against German counterattack is easy.

The Downing and the Watney-Downing defenses both propose holding the beach at W24. Two 2-3 infantry guard the beach itself, covered by not only the Italian navy but 12 air factors as well. French air have only a .277 probability of intercepting and grounding these factors. Thus, Italy enjoys a .723 probability of augmenting W24 with some DAS, making any invasion a 1-2 joke.

Alternatively, France can opt to throw her air units at the beach as Ground Support in lieu of trying to intercept. This could have the result of nailing Italy's entire air force, but can escalate French air losses. It does, however, skirt the whole problem of France's slim chances of successfully intercepting and grounding Axis air units. Should Italian air units decide to defend the beach, it makes an already critical battle even more important, as somebody will lose his entire air force!

Notice this choice is available to the Allies due to the nature of their attack, a 1-1 shot. Adding equal amounts of airpower, or near equal as in this case, does not change the odds; it merely escalates the cost of the battle. In this instance, it is the best chance the Allies have of obtaining 1-1 odds. Don't forget, the whole invasion can be called off without air losses if the battle at W24 is reduced to a 1-2 following naval losses. One way or the other, should France handle the Axis air, Britain can hit the beach at 16-12, 26-24 or any points between if only the invasion force slipped through the preceding naval battle unscathed.

If French air flies Ground Support, choosing not to intercept the Axis sortie, an Exchange (as opposed to a CA exchange) result precludes any British landing. On the other hand, should France manage to

Figure 4: The "Downing" Defense attempts to directly defend the W24 beach, while a lone armor unit in the north stops the entire Allied army. With Attrition success in Yugoslavia, one 3-3 goes to W24 and the extra 2-3 goes to Rome. (Again, German fleets are based in Bremen.)

Figure 5: Similar to both the "Revised Watney" and the "Downing", this defense holds everywhere as tough as possible without foregoing a Fall '39 Attrition invasion of Yugoslavia. With Attrition success there, one 3-3 goes to W24 and the extra 2-3 moves to X23.

intercept and ground those numerically superior enemy aircraft, Britain would have to lose 13 naval factors to reduce the invasion attack from a 16-12 (1-1 odds) to an 11-12 (1-2 odds). But consider what happens when only one British naval factor is lost, and why such loss is guaranteed.

Loss of a single naval factor is a crushing blow to Britain's chances because it ruins her invasion on an Exchange result. To understand this, it is necessary to examine exactly what is going on aboard the ships of this invasion force. In other words, who's on what ships?

Quite simply, there are nine factors loaded aboard (a 4-5, 2-5 and 3-4). They require three nine-factor fleets to convey them to the beach. None of these three fleets can be taken as combat losses at invasion. That leaves three bombarding nine-factor fleets which can be taken as losses in an Exchange in order to allow the ground forces ashore. If the Exchange happens to be, as in this case, one of 12 factors and the British elect to take fleet losses in order to land her troops, not only do these three fleets go down but also the 3-4 infantry. This leaves the 4-5 armor unit on the beach followed by the 2-5 to exploit. As always, a French fleet supplies this beachhead, allowing the exploitation.

Unfortunately, Britain will suffer fleet losses. If only one factor is sunk and the invasion result is an Exchange, it doesn't take a genius to figure out where the extra factor sails into the picture. First, in the naval engagement, a "bombardment" fleet loses a factor and becomes an eight-factor fleet. The invasion can still go off at 15-12. But if Britain suffers an Exchange result and must lose 12 factors at the beach, only eight of those can be lost from the bombarding force and the other four are, naturally, the 4-5 armor. Britain has failed, because a 3-4 and 2-5 attacking from W24 will not take Rome in the winter.

Thus, by defending W24, the Italian fleet can win not only by turning back the invasion, but also by reducing the enemy force to a "1-1 No Exchange Works" situation. Gateway cities Brindisi and

Durazzo are what make this interception a guaranteed one. In the Watney, this possibility does not exist. There the British navy must be defeated at sea to preclude a landing. Here, loss of seven fleet factors would make the invasion attack only a 1-2!

Notice that rearranging the units carried will not amend this situation. The two armor must land, and deleting the 3-4 infantry from the invasion force or substituting a 1-3 plus added shore bombardment does not improve the chances of effecting that result.

Avoiding Anglo-French "Punt" Tactics

When using the Downing Defense, it is important to maintain a double line before Rome, not including hex W24. This prevents either Western Ally clearing that hex with a cheap shot attack (committing a 2-3 or 1-3 plus Shore Bombardment for 1-2 odds, hoping for a die roll of "3") while nailing the 2-5 armor on the Italian-French border. In Winter, armor SRed to that border could hit an exposed single line an exploit into Rome.

This option gives the Allies opportunity to exercise an excellent one-two punch and avoids a double-turn commitment until after the results of the action at W24 are seen. The "Big Gamble" in this case comes on the first turn, and yet is not a terribly destructive gambit at that.

In this case, if French fleets hit hex W24, Italy is hard pressed to commit her navy to repulse what appears to be a lost cause. British fleets will be free to SR. Note that Britain still pays for an Offensive option and must attack an Italian or move onto Italian soil, and either France or Britain must kill the 2-5 on France's border. But, if eliminating W24's defenders gives one a shot at Rome, it can be well worth Anglo/French efforts.

The Friendly German

One advantage of defending W24 is gaining use of German DAS, which is useless to the Italian on defense unless it can be used at W24. Naturally enough, the problem is to convince him to place any unused air unit(s) in Graz. Air used in his autumn Polish campaign or elsewhere will do you no good since it won't be available to fly DAS in the Fall, the turn of Allied invasion. But, unless he is doing something else elaborate, your ally can pro-

vide this 2-4 and still conquer Poland easily in the Fall of 1939. If Germany simply won't supply this help, you still have a good chance that the Allies will call off the invasion in face of overwhelming odds, or meet defeat at W24 because of those odds. They still must sail through your entire fleet without major loss in order to deliver a chancy 1-1 attack at W24.

Another advantage of defending the beach is that British air cannot join in the battle, for two reasons. It cannot stage within range and could not combine with French air units over the target anyway. Notice that if you have forced Britain to use all six fleets, no British ground forces can be SRed across water—including any newly built armor in the islands. British air units, however, can be SRed as usual.

THE WATNEY-DOWNING DEFENSE

Strengths: Overland conquest of Rome is impossible.
Forces a 1-1 attack at W24, and only a slim chance of that.

Weaknesses: A 1-1 "D" result at W24 can lead to fall of Rome.

This combined defense is the culmination of everything discussed in the above. It borrows the superior northern defense from Mr. Watney and everything else from Mr. Downing. Everything is held as strongly as possible, including Libya, to prevent Allied successes. The result? Less than .04 probability that the Western Allies can take Rome.

To do it they must land two armor units at W24 in the face of the entire Italian navy and air force, supported by the Kriegsmarine and two factors of the Luftwaffe in Graz. They have a slim chance of delivering a 1-1 invasion attack in which any result other than "D" or "CA-Exchange" spells defeat. A second-turn attack on X23 and exploitation into Rome is anticlimactic after that, and nearly automatic. But I doubt any serious Allied player would take that initial gamble.

Squad Leader Clinic

ARMED AND ARMORED HALFTRACKS

By Jon Mishcon

The playtest experience in re-working *SL* scenarios #7 and #8 emphasized the considerable changes in the ways that *ASL* handles halftracks. This column reviews our thoughts for the tactical usage of armed and armored halftracks.

It is worthwhile to recall that halftracks were developed to provide pre-assault cross-country mobility for infantry and heavy weapons. Many nations also used fully-tracked carriers (i.e., Kangaroos, Brens, etc.) but the expense of production and maintenance of fully-tracked AFVs precluded their common use as mere transports. That, of course, is the key reason for the existence of halftracks. They were less expensive in every aspect than were tanks. Yet they could transport "soft targets" through shelling and sniper fire. Clearly, halftracks were viewed as "battlefield taxis", not as assault vehicles.

True, both Germans and Americans did use halftrack mounted troops to try and rip through weak defenses. However, the vulnerability of halftracks was pronounced. While quite resistant to shrapnel and rifle fire, they were easy prey to SCWs, even the lightest of ATGs, and even rifle-calibre MGs.

The original *SQUAD LEADER*, regretfully, portrayed halftracks as a kind of tankette. We often used clustered halftracks as a sort of armored assault group. Load three or so squads and leaders, drive up to within six hexes, pop-up in the Adavance Phase, blast away with defensive fire, and then drive off to the next target next turn. Ah, the good old days. Do that in *ASL* and you'll likely lose all three halftracks before getting off a single shot. Quite rightly too. That kind of clustered target would have brought a smile to any .50-calibre gunner.

There are two rule changes that have dictated a change in tactics. First, the improved armor penetration tables give a more realistic representation of the vulnerability of halftrack armor. Second, the ability of machine guns to take multiple shots means that tight concentrations may take a number of hits. Knowing that even a MMG will get three shots 11% of the time and may have a 16% Kill chance with each hit tends to make one a mite nervous.

So, forget the "mailed fist" tactic. Ditto using halftracks as isolated AA platforms. Even the use of halftracks as mobile MG platforms versus infantry is probably no longer a good idea. Generally speaking, a halftrack is easier to kill than an infantry-manned MG and usually the same MG used off-vehicle will have a higher rate of fire.

How do we use halftracks? One role is their historical one. Halftracks can generally carry more troops and SWs faster cross-country than any other vehicle. This mobility is always nice, and occasionally required (see the rewrite of "Hube's Pocket").

Even better is the "abandon ship" ploy. Take, for example, the M3 halftrack in "Buchholz Station". Firepower is "4", ROF is "1", range of eight hexes, and the vehicle is vulnerable to the German HMG out to a range of 16 hexes. Potential loss of five victory points. Rather than just hiding this vehicle away in a corner, try driving it up onto a reverse slope. Abandon the vehicle, taking the MG, and advance onto the ridgeline. Now you have a MMG with the same FP but a ROF of "2", a range of 10 hexes, and with a self-rallying crew. A much lower value target with a more potent weapon. Nicely done.

Halftracks are also the only decent way to get a four-squad fire group in one hex. (OK, OK, four squads and a crew—jeez, the nitpickers.) By "decent", I mean without the overstack penalties (see A5.4). This can be crucial. The American last stand in "Buchholz Station" is often 3X0. Most of the time this is held by three squads armed with two MMGs. Add in an M3 halftrack with a passenger squad and the firepower rises from "24" to "36". All commanded by the same leader! Much more intimidating.

Lastly, I must mention the *panzerblitz* assault. An AFV overruns an HMG position and stays in the hex, preferably in Motion. Halftracks then move up adjacent to the position and unload at least one squad. The HMG can't fire at the halftracks (A7.212) and the combination of overrun, adjacent infantry firepower, and close combat is usually enough to take the position. Even if the MG position is moderately well protected, laying OBA smoke down frequently permits the rush. The assaulting player then gets to experiment with a captured MG in the enemy rear or flank. Naturally, this kind of wild charge can be warded off by

adequate defenders flanking the HMG. The problem is often that the number of covering units seriously denudes any defending maneuver force.

The rules *have* changed. I think for the better. As conditions change, so must tactics. Sounds almost historical.

Our re-working of "Buchholz Station" and "The Bitchie Salient" are included on the insert of this issue to allow readers to get a chance to experiment further. Please allow us at this time to express our gratitude to Bill Connor, Andrea Cantatore, James Turpin, Mark Nixon and their associates for their continuing help in playtesting these scenarios. We would hope all the work is worth the effort.

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After Action Report—Escape from Velikiye Luki

These notes continue the series of commentaries in the Clinic pertaining to the scenarios published with the previous installment of the column (Vol. 24, No. 1 in this case). The intent is to provide the *ASL* player with one of numerous possibilities for defensive setup, attacker initial placement, and basic tactical approaches for both. Having had several months to examine your own approaches to our Clinic scenario, the reader can now compare his findings with our summation.

RUSSIAN: Place a "?" and two squads in 3B3; "?" and three squads with a MMG and 8-0 leader in 3E4; "?" and two squads in 3P2; "?" and three squads with a LMG in 3CC5 (HIP for two squads and the LMG); "?" over three squads, 9-1 leader and two LMGs in 3W4 (using HIP for all but one squad with a LMG); four "?" in 3N2 (2nd level) and "?" in 3W5.

GERMAN: Put the 10-2 leader, three squads and two LMGs on Cloaking Counter A; the 9-1, 8-1, two squads, two LMGs on Cloaking Counter B.

ATTACKER'S TACTICS: The German cloaking counters A, B, C are on one flank. Counters D and E are on the other. Might as well roll a die for which flank. Try to stick close to the board edge. Don't shoot unless you must.

DEFENDER'S TACTICS: Once the best Russian leader is activated, use him to alert your other troops rather than getting him immediately into the fray. Don't forget that the Germans must exit to win, so better to fight a delaying action than trying to win a stand-up fight. The key to winning lies in getting your 9-1 leader active ASAP. ☆

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Notice, too, that because Italy has not built the fifth fleet in Fall '39, she ends that turn with not only all her ground forces built, but with 47 BRPs instead of 38. These extra nine BRPs have tremendous impact on Allied plans for a double turn as they may preclude a vital French armored unit or replacement air build—or even a new British air unit. Every unit counts in any double-turn conquest of Italy, and this small matter (easily overlooked in a face-to-face game) may well be the Axis key to success.

The Watney-Downing is my choice for best Italian defense, unless the invasion of Yugoslavia is forgotten. But that's a matter to be considered elsewhere. In a "Mediterranean Power Play", Italian conquest of Yugoslavia is too vital to consider otherwise. That she will usually accomplish that goal in 1939 is a convenience too profound to waste.

A Monkey-Wrench

None of which is even remotely to suggest that the "best" defense is not necessarily what you want.

Figure 6: Italy at the end of the Allied Winter 1939 assault against the "Watney" Defense. The Axis face a job they can't handle. Rome is secure. All the air (except the German wings in Graz and Budapest) are "used" and might also have suffered reduction. The attack was expensive for the Allies, as they took most exchange losses from their air forces. But they have tossed Italy out of the war.

Not at all! My definition of "best" defense in this case is one which offers the best chance of repulsing, or better still intimidating, an Allied double-turn assault on Rome. That such a defense can preclude the Allies from even making such an attempt is, ironically, the weakest feature of this defense. That is, an even better defense would be one which leads the Allies to believe that they have a good shot at storming Rome, whereas in fact they don't. A trap, in other words.

In this respect, Watney's plan to not defend the W24 beach is a good one to use on an inexperienced player. He may think he has you with a "free" invasion and not foresee the problems he will encounter in the winter. He will probably not make the correct builds, will not provide any means for France to counterair an Italian airwing and will face a 1-2 attack against X23. You have trapped him. He was tricked into paying the DoW costs and wasting BRPs an effort in landing in what turned out to be, for the novice player, too demanding a situation.

The single-unit Downing Defense of northern Italy may catch a raw recruit napping, but in reality is quite transparent. Anyone who has played the game more than once or twice will realize he needs more than two turns to get to Rome from the north.

The full-blown beach defense I have outlined in the Watney-Downing falls flat on its face in the "gambit" category. It is not going to fool anyone into thinking he can get ashore. That's not its intent, which it avoids very well. It does prevent the Allies from trying, unless they want to win or lose the game in the first two turns. Say—96% lose, 4% win.

Indeed, I'm not too sure how anyone would go about reporting such a trap in the pages of The *GENERAL*. The instant it sees print, everyone will

know to avoid it. Lindsey Murillo was right: the whole thing defies description and can only occur during the course of play. We all know the feeling when it happens too!

AN ACT OF DESPERATION

My final assessment is that against the Watney Defense, Britain enjoys too good a shot at knocking out Italy for my tastes. That is why I prefer the Watney-Downing. Using that defense, Britain will take Rome only four times in 100 games; she might try 24 times without the first victory, all die rolls being equal.

The irony of it all is that any Allied player clever enough to identify this slim chance of taking Rome is also clever enough to avoid it, safe in the knowledge that he can find some more certain manner to win the war at a later opportunity. A player desperate enough to launch such an invasion will first of all likely lose the attack or, if successful, likely lose the game on some later turn by taking some other similar long shot in yet another attempt to offset what he must consider to be his opponent's superior play. ☆

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The San Diego ASL club wants you! Any level of player welcome. Eric Johnson, 1238 Rubenstein Ave., Cardiff, CA 92007 (619) 944-5536.

Opponent wanted: mature adult for SL series gaming. Have campaign system. Craig Nelson, 911 Edna Ct., Rohnert Park, CA 94928, (707) 584-5857.

Adult gamer seeks pbm or ftf gaming for the fun and thrill of it. Most interested in 3R, BB'81, PL, FE; own over 100 games. Mark Aruggiero, 7475 Stockton Blvd., #43, Sacramento, CA 95823, (916) 682-4539.

Wanted: pbm opponents and clubs. Will consider any pbm game. Interested in GM run games. Will be AREA Rated soon. Will answer all letters promptly. Chuck Kroegel, 86 Tennant Ave., San Jose, CA 95138, (408) 629-6359.

Wanted pbm for SL thru GI. Also, ASL. Any scenario or DYO. Your system. All letters answered. Eric Lauterbach, P.O. Box 8101/Room 3399 (C-14846), SanLuisObispo, CA 93409.

Adult seeks pbm of Coral Sea variant of MD using my system. Ron FE, SST. Charles Ryder, 1700 Civic Center Dr., #210, Santa Clara, CA 95050, (408) 249-7658.

Adult looking for fast, experienced players to try pbm system for AIW and PL. Also wish to pbm TRC. Charles Ryder, 1700 Civic Center Dr., #210, Santa Clara, CA 95050, (408) 249-7658.

26-year old seeks ftf PB, PL, AIW, BL, SL series, 3R, and others in LA area. Ron Whitaker, Box 14271, Torrance, CA 90503.

27-year old seeks opponent for ftf ASL, TRC, 3R, and many others in the Naples, Fort Myers area. Any wargame clubs in this area? Dean Leferink, 4627 Bayshore Dr., Apt. I-4, Naples, FL 33962, (813) 774-2453.

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Wanted ftf opponents in Bay area for TLD, RF, 3R, FE, BB, PL, PB, or most any game playable. Eugene P. Harvey, 3963 58th Lane N., St. Petersburg, FL 33709, 343-2015.

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AREA Rated 1700+ desires opponents for Rated pbm BL or PB. CoC required. Rich Wangenheim, 738 Bernadette Lane, Batavia, IL 60510, (312) 406-1306.

23-year old veteran SL, TRC, AK seeking ftf opponents in Chicago area. Monty towers over Patton, Rommel in tactical warfare in North Africa. Scott Holst, 5530 N. Artesian, Chicago, IL 60625, 769-2193.

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35-year old, (unproven AREA Rated 1200); beginning to average player, seeks "live" adult gamer for: SL, PB, PL, AIW, FR, STAL, DIP. Mr. Leslie Boston, 326 E. Adams, Apt. #1, Havana, IL 62644, (309) 543-2103.

Experienced yet Provisional 1600 seeks first pbm AREA match in 3R, PK, FE or RF. Either side OK, 1400+ preferred. Doug Lundquist, 1915 Oxford Ave., Rockford, IL 61103, (815) 962-4328.

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I play ASL, FL, FE. Need opponents in FT—Campbell area. Patrick McGrattan, 4717 F Lee Vlg., Ft. Campbell, KY 42223, (502) 439-4353.

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ASLers where are you! Looking ftf ASL opponents in Lafayette, LA area. Also looking for club. Will play other games. Will travel short distances. ASL, 3R, FP. Keith Martin, 108 Meadow Lane, Lafayette, LA 70506, (318) 981-2995.

New Orleans Area Gamers Club seeks players for all game types and skill levels. Greg Schloesser, 3800 Briant Dr., Marrero, LA 70072, (504) 347-7145.

Wanted opponents for ftf or pbm 3R, W&P, MD, AK, PK, MD. Will travel to play a game in Louisiana. Ricci Moran, P.O. Box 1065, Ruston, LA 71273, (318) 251-9038.

Beginning adult gamer wants pbm opponents for SL, BL or game of your choice. Need system. Peter Shannon, 7A Queentree Ct., Balto, MD 21207.

Adult gamer seeking ftf opponents in D.C. Metro area. Non-Rated but experienced. Will play VITP, BR, RF, TRC, FT, CAE or your favorite. Ross Sutton, 9110 Louis Ave., Silver Spring, MD 20910, 587-2043.

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Looking to form ASL club and playtest group in greater Springfield area. Also play, UF, Banz, PF, BB, RF, 3R. Vic Provost, 54 Ednson Ct., Chicopee, MA 01020, 593-5849.

Wanted: veterans and novices alike to start ASL club in greater Springfield area. Those interested call evenings after 7 p.m. Vic Provost, 54 Ednson Ct., Chicopee, MA 01020, 593-5849.

Opponent wanted—Boston, MA area—all Civil War games; BR, DD, CH, GE, LRT. David Treadway, 228 Boston Post Road, Weston, MA 02193, (617) 899-3601.

Western Massachusetts area gamers wanted for multi-player DIP, CIV, 1830, Pax Brittanica. Also pbm or ftf most strategic level AH games. Leonard Kay, 21 Prospect St., Ware, MA 01082, (413) 967-5772.

Wanted one BL pbm opponent. Have good 50 turn TRC. Send phone number; answer all replies. Jim B. Cameron, 308 E. 7th St., Albert Lea, MN 56007, (507) 373-1285.

Players wanted with pbm to SL-COD, 3R. Will ftf but unable to travel very far. All letters promptly answered. Soldiers answer the call! Russell Brown, 780 McManamy Draw, Kalispell, MT 99901, (406) 799-5336.

Pbm hobby needs new blood! Pbm gamemaster since 1976 offers DIP, CIV, variants players. Info on games, zines, and services—send $1.00. W.E.J. Hinton Jr., 20 Almont St., Nashua, NH 03060.

USAREUR Wargamers: REDLEG III Wargaming Weekend is scheduled for 5/6 March 1988 at Herzo Artillery Base Ed Ctr. Boardgames only. Be There! Jim Neville, APO NY 09352, Tel: ETS (4653-887).

AREA Rated 1200 (Prov) seeks Rated pbm for PB, LW. Also ftf for opponents in Mannheim-Heidelberg (FRG) area all games. CW2 James P. O'Donnell, B Co 6/158th AVN RGT, APO NY 09028, 06203-14079.

Wanted AREA opponents for PB or TRC. I'm Rated 900. It doesn't matter if you're German or Russian. Larry L. Winn, Co. B 4/502 INF, APO NY 09742.

Wargamers! Join us at the Wharton Brks Gamers Club every Sat. 1 p.m. 'til ? at the Rec. Ctr. Info: Larry (07131) 629065, after 6. Pfc Larry Behrendt, 261st PSC, APO NY 09176.

Experienced ASL player seeks opponents in Europe. I will travel for ASL. Also play PB, PL many more. Stationed in Schwabish Gmund, FRG. Tom Kearney, A. Btry 2/9 FA, APO NY 09281.

AREA 1750+ verified seeks pbm opponents for TRC, BL, NATO, PK. Prefer opponents 1500+ who will play two game matches switching sides. Marc Dultz, 224-01B Kingsbury Ave., Bayside, NY 11364, (718) 465-3292.

Wanted ftf opponents for BS, FT, HW, VITP, and the SL series. Willing to try others—ftf only. Robert Sienel, Box 557 Maritime Col. Bronx, NY 10465.

Need pbm players, variants, articles for MA, SA, $6.00—10 issues. Society of Machivellians, 430 Ocean Parkway, Suite 3-0, Brooklyn, NY 11218, (718) 826-2709.

Wanted gamer to play SL, ASL and Civil War all games and can host games at my home BU, SOF, PARA, YANKS, HH. Larry Serwacki, 18 Woltz, Buffalo, NY 14212, 892-1032.

Are there any wargamers out there? Will play all forms of SL and ASL; also enjoy all Civil War games. Can host gaming and all games available. Larry Serwacki, 18 Woltz, Buffalo, NY 14212, (716) 892-1032.

Ftf players wanted in NYC! SOA, SUB, SL, UF, VITP, AF, etc. . . . I'm a fair player. Good clean fun. No kooks please; have 50 games. John P. Caccioppoli, 68-60, 108 St., Apt. SL-1, Forest Hills, NY 11375, (718) 261-3616.

Squadron 718 is on the look for new members. We fly Flight Leader, usually on weekends. If interested call: Jim Kelly, P.O. Box 45, Ft. Tiblen, NY 11695, (718) 945-3810.

ASL'ers in N.Y.C. fall in and report ASAP; also FE. I'll travel if you won't. I'm looking for a club in the area. Bill Lertola, 131-06 226 St., Laurelton, NY 11413, (718) 341-1641.

Long Island adult wargamers! 40-year old returnee seeks ftf, pbm, pb phone gamers for RF, 3R, TRC, VITP, PK, PL. Maybe a club for multi-player games. Ron Baltrunas, 4 E. Lincoln Ave., Massapequa, NY 11758, (516) 795-2308.

1200 (Prov) adult gamer seeks pbm PB, others considered. Returning to hobby after several years. Ftf possible in other games. Allan Jarvie, 66 Cummings St., Rochester, NY 14609, (716) 288-4652.

Average ftf player wishing to learn pbm; seeks opponents for SST, SUB, PL, RW and WSIM. Must have system, and all inquiries will be answered. Eric Townsend, 408 W. Queen St., Apt. C-3, Boone, NC 28607, (704) 262-5294.

Adult gamer looking for pbm opponents BB'65, TRC, VITP, SL, FT—I'm AREA Rated. Also pbm Victory's Civil War and Pacific War. David Blaylock, 119 Allen Farm Rd., Canton, NC 28716, (704) 648-7514.

Wish to contact ASL players/groups in NC, SC, southern VA and western TN in order to organize regional ASL weekend for spring 1989. Contact: Raymond Woloszyn, 7162 Mantlewood Ln., Kernersville, NC 27284, (919) 996-5677.

Adult opponents wanted for ftf SL/ASL and others in Dayton area. Also pbm 6th Fleet. Have system. Joe Strzelecki, 249 W. Funderburg #23, Fairborn, OH 45324, (513) 878-5269.

Opponents wanted for DIP on Cleveland's far east side. All experience levels welcome. Peter Georges, 5773 Fenwood Court, Mentor, OH 44060, (216) 257-2947.

ASL opponents! Rise from your foxholes to meet me in fair combat. Feign not barvery, prove it on the field of honor! Rob Zeller, 2203 Cass, Toledo, OH 43614, (419) 381-1344.

SL veteran looking for ftf ASL in greater Portland-Vancouver area. BV, PARA, SOF, YANKS, HH. Steve Smith, 10300 SE Waverley Ct. #201, Milwaukie, OR 97222, (503) 659-8399.

Join Penn-Jersey Gamers; monthly meetings. All games—no role playing. Newsletter, tournaments, raffle. For more info. send SASE to: Jim Vroom, 2290 Galloway Rd., A-23, Bensalem, PA 19020.

Der Grosster Feldherr Aller Zeiten wishes to ftf anyone who dares in NAB, SON, W&P, HDB or any other game. Tom Semian, 219½ Kittanning St., Pittsburgh, PA 15215, 781-2147.

AREA 1500+ seeks Rated pbm BR and/or Russian Front. All foes 1200+ accepted. James Lawson, 1515 Gist St., Bldg. #1, Columbia, SC 29202.

Competent adult player desperately seeking opponents for ASL in the Clarksville area. Scenarios or DYO macro campaign games. Can travel. Ftf only, let's do it! Martin Tichen, 27 Leonard Dr., Clarksville, TN 37042, (615) 647-9233.

Pbm ASL adult gamers AREA 1460CDG seeking opponents— no quitters please. Modem?? Call Story Cellar (915) 821-0054 War Gamers Conference for BBS, SL. Don Fenton, 11629 James Grant Dr., El Paso, TX 79936, (915) 855-3030.

Fort Hood Killeen area: seek ftf in ASL, BV, PARA, 3R, HW, TLD. Reside on post. SSG David Silva, B 1/3 FA ZAD, Fort Hood, TX 76546. (817) 287-6031.

Good opponent wanted; ftf or pbm. Many AH and VG games. I've been playing for 10-years; TRC, 3R, W&P, WSIM are favorites. Russell Rowe, 508 17th St., Nederland, TX 77627, (409) 727-1001.

The Wash. Gamers Assn. meets monthly. Members receive 6 issue sub to our newsletter (current issue #101). Free ads and contact service. Contact: Dennis Wang, 2200 Huntington Ave., Alexandria, VA 22303, (703) 960-1259.

Adult gamer seeks ftf opponents for almost any game, including SST, AL, RB, WSIM, AZ, 1776, FT, FITW, SUB. Donald Franczyk, 4623 N. 3rd St., Arlington, VA 22203, 841-1077.

Ftf ASL and other AH games. Opponents wanted in Colonial Heights, Petersburg, Ft. Lee, Hopewell area. Any friendly gamers over 18-years old, please call: Jim Pyle, 913 Conjurers Dr., Colonial Heights, VA 23834, 520-7350.

Ftf for DEV, BR, UF, RF, and others. Forming local club within Winchester, Manassas, Frederick area. Mac Willingham, P.O. Box 526, Leesburg, VA 22075, (703) 777-5367.

Attention Montgomery, PG, DC and N. Virginia gamers! Memberships in The Washington Gamers Association are now available—13-years and 101 issues old. Please contact: M.K. Willingham, Chairman, P.O. Box 526, Leesburg, VA 22075.

Any gamers near Bull Run battlefield in No. VA play 3R, CW, EIA etc.? I can leave game set up. Want to form a club? Don Johnson, 9430 Brentsville, Manassas, VA 22111, (703) 369-4641.

Redundant 35-year old wants to try to attempt to play 3R, CW, RF, EIA, HW, etc. Maybe form or join club near Bull Run. Don Johnson, 9430 Brentsville, Manassas, VA 22111, (703) 369-4641.

Adult gamer new to Richmond seeks ftf players for ASL, UF, RF. Will travel. Fun only. Average player with good knowledge of ASL rules. John Loth, 2018 Park Ave., Richmond, VA 23220, (804) 355-5376.

Need someone to play 1830 with. I also play DIP, CIV, CONQ, and W&P. You best be good. Jared Jansma, Tacoma, WA 98466, (206) 566-1443.

Game Players Assoc. meets every other Saturday on the UWGB campus from 6 p.m. to 12 a.m. Future meeting dates: March 12, 26, April 9, 23. Call or write: Steven Schneider, 1429 S. Monroe Ave., Green Bay, WI 54301, (414) 437-5576.

Campaign SL-ASL pbm game starting. Send $1.00 for information. Specify if AREA Rated. All inquiries welcome. Kelly Speelman, L.S.A.L., P.O. Box 7949, Jeddah, Kingdom of Saudi Arabia 21472, 619-0000 (ext. 276).

Anyone in Europe or U.S. interested in pbm TRC, STAL, BB, FE? My AREA Rating is 1570 (Provisional) and I will answer all letters. George Weis, Linden Str. 12, 5000 Koln 1, West Germany, 0221/21.88.81.

Attention wargamers in Germany here I am! I play all! Especially ASL, SL (set), 3R, KM, EIA. Roy Casagranda, Malteserweg 14, 8700 Wuerzburg/Lengfeld, or 67th EVAC, Box 45, APO NY 09801.

Anyone play ASL/BV- PARA- YANKS? Also pbm/ftf SL, FL, FP, FITG, TAC, preferably ftf. Willing to learn some others. Mike Smith, HHC, 543rd ASG, Box 513, APO NY 09069, Bremerhaven, W. Germany, (0471) 802155.

THE QUESTION BOX

RAID ON ST. NAZAIRE

4.82 Can a demolition attack be made in the same game turn that its Preparation roll is passed?
A. Yes.

6.1 Can Gun and Searchlight units with a Disrupted or Out of Action marker roll to remove it if Commandos occupy the same area?
A. Yes.

8.1 Does the *Campbeltown* need one MF to enter LZ 111 *and* one MF to ram the Southern Caisson?
A. No, the act of ramming is considered entry of the Landing Zone.

8.4 May torpedo attacks be made against Swing Bridges?
A. No.

8.4 Must torpedo attacks be pre-designated?
A. No.

8.4 Is the Southern Caisson a "Lock Gate"?
A. No.

8.4 Is the Lock Gate in Area 313 a single target for a torpedo attack, or would it take two torpedo attacks as the artwork suggests to eliminate the Lock Gate?
A. A single attack destroying one of the gates earns all 4 Victory Points. No further VP are earned by attacking the same gate twice to destroy the other gate.

9.3 If a Triad activates a Stosstruppen in a VP Area that has already been destroyed by Demolition attack, is it still activated?
A. Yes—unless it is an "over-water" Area.

9.5 and 11.7 What happens if a fourth Armored Car is activated (the counter mix only contains three)?
A. Any eliminated Armored Car is eligible for re-Activation; but if all three Armored Cars are presently in the game, bring another Stosstrupp unit instead.

10.3 Does it cost a land MF for Commandos to land?
A. No—but they "have one less MF during the turn they are landed", which amounts to the same thing.

10.3 Does the extra MF expended to leave an enemy-occupied area apply if the enemy unit is a Disrupted/Out of Action Gun or Searchlight?
A. Yes.

10.6 Errata Delete "units with a strength less than 6" and substitute "units, each with a strength less than 6".

11.4 What effect does a Damage result from a Demolition attack have on a Gun/Searchlight?

A. Demolition attacks are not allowed against Guns/Searchlights unless they are Disrupted/Out of Action and are the only functioning German unit in the area.

11.6 Will a grenade attack eliminate any infantry accompanying a Gun in a Land Zone?
A. No—if you attack the gun, the grenade attack affects no other units in that zone.

12.1 If a Demolition unit's Primary Target has already been destroyed by some other means, is it free to perform demolition attacks of its choice?
A. Yes.

12.2 Is there any effect on German units in an Area when the VP target there is eliminated?
A. No—unless it is an "over-water" Area (as per 12.5).

12.4 If a Demo Attack against an already damaged target results in another "Damaged" result, is the Prepared Charge eliminated or—because it has no effect—does it remain in place?
A. The Prepared Charge has been used in causing the "Damaged" result; remove it. It is the effect of multiple damage results that has no additional effect—not the non-detonation of the charge.

13.21 If a Commando unit enters a ship already containing another Commando unit, is *another* Stosstrupp activated there?
A. No. However, if a ship has been entered previously by a Commando (thus activating a Stosstrupp) and that Commando is no longer present, the ship would again be subject to activation if reboarded while no Commando unit was on board.

13.21 If a ship withdraws with a Commando aboard attending an already Prepared Charge, is the Prepared Charge taken off with the Commando or is the Charge lost?
A. The Charge is lost; the previous ammunition expenditure appends (12.1).

14.2 Does the prohibition against leaving the hexagonal Areas apply to Stosstruppen brought to Area 443 by ship?
A. Yes.

15.2 Are units not withdrawn from the mapboard "survivors" if they can't be fired on at game end?
A. No—they must be withdrawn.

16. When varying "Landing Areas", can you select a Landing Area other than 366, 336 or 111?
A. No—a landing anywhere else would constitute a Forced Landing (8.5).

AH RBG RATING CHARTS

The following games are ranked by their reader-generated overall Value rating. Further aspects of reader response to our titles are indicated by the ratings in other categories. By breaking down a game's ratings into these individual categories, the gamer is able to discern for himself where the title's strengths and weaknesses lie in the qualities he values highly.

Title	Overall Value	Components	Complexity	Completeness of Rules	Playability	Authenticity	Length Shortest	Longest	Year	Sample Base
1. ASL	1.67	1.44	10	1.81	2.80	1.98	—	—	1985	133
2. SOF	1.84	1.54	10	1.89	2.27	1.70	17.71	43.64	1986	79
3. RF	2.00	2.78	5	4.15	2.56	2.36	15.54	89.64	1985	88
4. GI	2.02	1.93	10	3.01	3.38	1.88	12.84	35.33	1982	264
5. COI	2.06	1.95	9	3.29	3.13	1.99	11.61	29.77	1978	532
6. BV	2.09	1.95	10	—	2.82	1.86	13.14	39.20	1985	95
7. 3R	2.21	2.67	10	3.81	3.40	2.73	25.94	69.24	1981	273
8. COD	2.23	1.97	10	3.12	3.08	1.85	12.15	30.20	1980	224
9. TRC	2.29	2.53	4	2.52	2.12	3.11	17.44	37.74	1976	540
10. SL	2.31	2.09	8	3.48	2.87	2.45	10.17	27.90	1977	680
11. UF	2.42	2.26	4	2.57	1.31	2.84	4.84	13.05	1983	58
12. B-17	2.51	2.62	3	2.52	1.86	2.21	3.30	11.50	1983	87
13. WS&IM	2.53	3.04	6	2.93	2.67	2.39	7.01	34.90	1975	464
14. FP	2.57	3.10	4	3.12	2.91	2.87	5.42	16.81	1985	85
15. HW	2.59	3.27	4	3.68	2.13	4.25	8.27	21.73	1984	63
16. W&P	2.61	2.76	5	3.46	2.93	3.04	13.04	57.19	1980	374
17. BB'81	2.67	2.46	4	2.53	2.94	2.91	19.62	35.09	1981	277
18. TLD	2.68	1.95	8	3.72	3.54	2.04	24.44	170.68	1980	119
19. VITP	2.72	2.86	2	2.89	2.22	4.52	16.96	22.36	1977	420
20. CAE	2.85	3.01	4	2.32	2.89	2.52	25.14	32.57	1976	252
21. SON	2.92	3.03	10	3.72	4.09	1.92	29.50	81.78	1981	123
22. SOA	2.97	2.79	3	2.73	2.41	3.88	18.22	22.57	1981	232
23. FE	3.00	2.72	7	3.21	3.21	3.00	21.17	49.05	1980	345
24. FRED	3.00	3.41	4	2.93	2.58	2.75	12.25	24.67	1983	58
25. SUB	3.08	2.64	8	3.13	3.08	2.74	9.41	26.15	1978	281
26. CON	3.12	3.64	7	3.08	2.52	3.52	25.8	49.1	1983	73
27. MD	3.13	3.51	3	2.80	2.21	3.44	14.75	20.74	1964	395
28. AZ	3.17	2.72	7	3.18	3.86	2.68	18.63	63.40	1978	292
29. PL	3.19	2.94	7	3.31	3.13	3.50	9.49	25.80	1974	479
30. 1776	3.21	2.97	7	3.09	3.03	3.10	10.16	45.09	1974	373
31. FT	3.23	3.12	10	3.22	3.67	3.16	24.51	57.39	1981	196
32. PK	3.34	4.02	4	3.48	2.85	3.27	11.85	20.34	1983	59
33. PB	3.35	3.08	6	3.73	2.90	3.94	10.35	23.07	1970	448
34. BIS	3.45	2.96	6	3.43	3.25	3.06	12.41	26.35	1979	248
35. AAOC	3.52	2.95	5	3.02	3.26	3.07	15.52	26.53	1978	239
36. FITW	3.53	3.14	4	3.17	2.94	3.72	16.14	30.01	1981	100
37. CL	3.54	3.35	5	3.15	3.33	3.79	12.53	25.53	1975	136
38. DL	3.61	4.02	7	3.85	3.22	3.29	6.66	19.94	1981	120
39. GOA	3.66	3.37	5	3.67	3.79	2.98	18.68	60.06	1981	297
40. WAS	3.71	3.67	1	2.48	2.37	5.98	9.09	12.71	1976	396
41. GE	3.72	3.12	6	4.64	4.41	2.84	13.25	57.13	1977	248
42. AF	3.74	4.16	8	3.98	3.34	3.35	5.61	16.02	1980	192
43. AIW	3.74	3.05	4	2.92	3.52	3.06	8.69	25.36	1977	308
44. LRT	3.75	3.60	4	3.53	3.39	2.96	13.04	17.00	1982	56
45. TR	3.80	3.76	3	3.33	3.60	3.70	9.51	25.79	1980	72
46. WAT	3.83	4.17	2	2.95	2.64	5.00	17.08	23.13	1962	296
47. NP	3.87	3.29	3	3.27	2.56	4.89	9.69	14.40	1978	159
48. AK	3.92	4.38	2	2.30	2.48	5.09	14.49	19.13	1964	492
49. AL	4.03	4.05	5	3.69	3.18	3.57	12.34	17.93	1974	217
50. TB	4.06	3.53	7	3.48	4.47	2.50	11.28	32.50	1975	304
51. RW	4.14	3.14	5	3.32	2.91	3.98	4.22	21.15	1973	311
52. JU	4.17	3.20	6	3.61	3.83	3.22	16.01	36.66	1974	193
53. PAA	4.17	4.24	5	3.79	3.99	3.70	15.51	25.24	1981	144
54. DD	4.22	4.07	2	3.04	2.88	4.64	17.54	26.25	1977	367
55. CH	4.39	3.80	4	3.35	3.52	4.67	14.76	24.96	1961	140
56. STAL	4.39	4.29	2	2.88	2.75	5.83	20.57	28.85	1963	320
57. LW	4.45	3.75	5	3.77	3.79	4.79	13.36	34.14	1971	372
58. FR	4.79	3.49	4	3.47	3.75	4.06	16.27	26.95	1972	244
59. BL	4.73	4.16	7	3.65	3.77	5.27	20.43	41.44	1965	336
60. TAC	5.62	5.25	1	2.79	3.23	6.34	11.70	19.29	1961	285

Surprisingly, our second consecutive issue featuring *ADVANCED SQUAD LEADER* (Vol. 24, No. 2) actually garnered a better overall rating—2.78. However, also surprising, the top-rated articles (in the view of the readers) dealt not with that game system but with some of the older favorites—*FORTRESS EUROPA, PANZER LEADER* and *THIRD REICH*. The ratings for all the articles, based on a random sampling of reader responses (with three points awarded for first choice, two for second and one for third), are as follows:

LITTLE THINGS MEAN A LOT 296
FIGHTING THE PANZER LEADER 220
THE EMPIRE'S STRIKE BACKFIRES 195
SQUAD LEADER CLINIC 119
FIRST IMPRESSIONS 104
SERIES REPLAY 84
AH PHILOSOPHY 65
NOT JUST ANOTHER DAY 60
STORMING FORTRESSES IN 3R 57

One of the reasons for *RUSSIAN CAMPAIGN's* popularity is doubtless its relatively short playing time in the postal format. Not only has the AREA *RUSSIAN CAMPAIGN* tournament ended, but the champion—Pat Flory—has successfully defended his title against the first challenger, Dale Garbutt. Challenge matches take the form of dual games with each player playing both sides. In the case of a split decision, the winner is the player who won his game first or with the most victory points. Such was the case here as the Germans swept both games, but Pat was able to hold onto three Russian cities while Dale could manage but two. Congratulations to champion and challenger alike for a well-played and exciting match—which is what wargaming is all about. Any other members of AREA Top 50 list wishing to challenge Mr. Flory for the AREA *RUSSIAN CAMPAIGN* Championship should forward their challenges to Don Greenwood (c/o The Avalon Hill Game Company). As always, current AREA rankings will decide the next challenger.

Due to a tumultuous demand from hobby shops across the country, The Avalon Hill Game Company is going to bring *CROSS OF IRON* back from the dead (well, at least, from the discontinued) and reprint a limited number. New fans of *SQUAD LEADER* who have wanted to add this "classic" gamette to their collection will soon have their chance. The new printing will carry the price of $24.00. Watch for this in your local store.

It is rare that any game club can celebrate a decade of existance; as other concerns impinge upon the aging members, most such organizations fade away like old soldiers. Therefore, it is with great pleasure that we extend our congratulations to *Le Marshalate* for reaching this milestone. In the most recent issue of their excellent newsletter, *Lines of Communication*, the "old guard" of that club celebrate, deservedly so, all that they have done to promote our hobby of wargaming in the northeastern United States. Since 1977, Le Marshalate has remained a small, high quality club for grognards; that the level of intensity, interest and competitiveness has remained high for ten years is no doubt due to the comraderie of the founding members, most of whom remain enrolled. Readers in the Manchester region of New Hampshire who might be interested in the doings of Le Marshalate are encouraged to contact Mr. John Czeciuk (462 Blodgett Street, Manchester, NH 03104). Once again, congratulations on your anniversary from all at The Avalon Hill Game Company.

Infiltrator's Report

Even before spring reaches out, thoughts turn to ORIGINS here. Held this year in Milwaukee in mid-August, The Avalon Hill Game Company is already planning a strong showing at the convention. Several designers will be on hand, hosting tournaments in such varied fare as *ASL, PLATOON, BRITANNIA, FLIGHT LEADER* and *KREMLIN, ENEMY IN SIGHT, MERCHANTS OF VENUS, DINOSAURS OF THE LOST WORLD* and *TAC AIR*. Bill Peschel will be around to answer your questions on our computer games, and will have the hardware and software to give you a chance to try your hand at *Computer WS&IM*. If some of these unfamiliar titles sound intriguing to you, stop by our booth. To show our appreciation, we've even put together a free surprise gift for those who do. Just clip the AH gift coupon from the convention program and present it to any of us at The Avalon Hill Game Company display. We'll plan on seeing you there

Contest 138 proved to be quite a challenge, more so than we'd expected. The response to it was extensive, and sorting through the many proposed solutions was something of a task. In the end, we disqualified all that used naval firepower in any manner (19.9) or that used SAC to bomb the Orne bridges. Still we were left with some hundred

SO THAT'S WHAT YOU'VE BEEN PLAYING

Titles Listed: 106   Total Responses: 472

Rank: Title	Pub	Rank Last Time	Times On List	Freq. Ratio
1. Advanced SL	AH	1	12	4.6
2. Third Reich	AH	11	41	2.8
3. Yanks	AH	3	3	2.5
4. Russian Campaign	AH	10	41	2.3
5. Beyond Valor	AH	4	7	2.1
6. B-17	AH	17	9	2.0
7. Fortress Europa	AH	—	1	1.9
8. Paratrooper	AH	14	7	1.8
9. Up Front	AH	15	23	1.7
10. Diplomacy	AH	13	13	1.6
11. Squad Leader	AH	6	41	1.5
12. Panzer Leader	AH	—	1	1.4
13. VITP	AH	—	1	1.4
14. Bulge '81	AH	—	1	1.3
15. Hedgerow Hell	AH	5	2	1.2
16. Patton's Best	AH	9	2	1.2
17. WS&IM	AH	18	2	1.1
18. Empires in Arms	AH	20	4	1.0
19. Russian Front	AH	8	3	1.0
20. War & Peace	AH	—	1	1.0

Summer means conventions; and conventions mean tournaments. Perhaps that explains why some folk pull those classic games off the shelf and blow the dust off. This installment of our survey of what readers are playing looks like "old home week", with quite a few of our older titles drawing some interest as the "tournament season" looms; *FORTRESS EUROPA, PANZER LEADER, VICTORY IN THE PACIFIC, BULGE '81* and *WAR & PEACE*. Of course, our recent coverage of such titles in these pages hasn't hurt their standings either. Surprisingly (for me at least), *HEDGEROW HELL* seems to have edged out the original "Deluxe" *ASL* module among the *ASL* fraternity. And *PATTON'S BEST* continues to command attention among and garner praise from those who play solitaire games. Due to the continued success of solitaire games such as *B-17* and *PATTON'S BEST*, I suspect that we will see ever more games produced for the "isolationists".

entries, so we looked for certain key elements in the solutions offered—namely an attack on the 3rd Luftwaffe and 275th Infantry with a carpet bombing modifier and for the American infantry units to end the turn with the mulberry harbor. That left us with seven winners: Thomas Bordeaux, Booneville, MS; Frank Calcagno, Billings, MT; Roger Hyman, Powell, TN; Marvin Levine, Kaukauna, WI; Larry Rice, Maumee, OH; Frank Spisak, Jr., Lucasville, OH; and Patrick Wells, San Diego, CA.

Contest 139 offered a straightforward tactical exercise in *DIPLOMACY*. Although many folk seemingly looked for some sort of trick on our part in the exercise, none was intended. The sole criteria for a successful response lay in seizing as many centers from your selected enemy as possible. Looking at both proposed alliances in the East, it becomes obvious that your preferred enemy must be Turkey and your preferred ally must be Russia—at least for the short-term.

If allied with Turkey against Russia, you can gain Budapest without much trouble. The Italian moves as follows:

Army Apulia to Venice
Army Trieste to Budapest
Army Vienna support A Trieste to Budapest
Fleet Aegean Sea to Ionian Sea
Fleet Ionian Sea to Adriatic Sea
Fleet Tyrrhenian is irrelevent

Meanwhile, the Turk—under your complete control, makes the following moves:

Army Armenia to Sevastopol
Fleet Ankara to Black Sea
Fleet Bulgaria to Rumania
Army Serbia support F Bulgaria to Rumania

Thus, Russia loses two centers (Budapest and Rumania), while Italy and Turkey each gain one. Not the best of situations, as your erstwhile ally remains as strong as you (indeed, possible stronger if he takes Sevastopol) and in a position to readily attack Italian holdings if he should so desire. Worse, the Russian army dislodged from Budapest can retreat to Galicia to bedevil you further. You've gained Budapest and moved into position to support Trieste, but things would have been better if you had attacked Turkey.

With Russia as an ally, you can look covetously at both Serbia and Greece. The Italian moves are obvious:

Army Apulia to Greece
Fleet Ionian Sea convoy A Apulia to Greece
Fleet Aegean Sea support A Apulia to Greece
Army Trieste to Serbia
Army Vienna to Trieste

and again, Fleet Tyrrhenian Sea is irrelevant. Being your best friend (at the moment), all the Russian need do is support your move into Serbia from Budapest and attack Bulgaria (and moves from Moscow to Sevastopol to insure that the Turk doesn't recoup any of his losses). Even to readers not familiar with *DIPLOMACY*, it should be obvious that this gains Italy two builds in the upcoming Winter turn. At least one of the Turkish units is eliminated (only one can retreat to Albania, and it can be readily eliminated next turn if the Turkish player is foolish enough to leave it on the board unsupported). With a touch of luck, Russia gains nothing. Your lines are much more secure against any Russian treachery, and together the two of you can likely crush Turkey within a year or so.

Looking ahead, an army must be built in Venice to maintain your strong position in Austria as Italy and Russia continue the offensive eastwards. The other new Italian unit should be either a fleet or an army in Naples (to threaten Smyrna in Spring 1905).

WHAT HAVE YOU BEEN PLAYING?

Top ten lists are seemingly always in vogue these days. Whether the subject is books on the Best Seller List, television's Nielsen ratings, or even games, the public never seems to tire of seeing how their individual favorites stack up numerically against the competition. Our preoccupation with this national pastime is almost akin to rooting the home team on to victory every Sunday. So to further cater to your whims (and to satisfy our own curiosity) we unveil The *GENERAL*'s version of the gamer's TOP TEN.

We won't ask you to objectively rate any game. That sort of thing is already done in these pages and elsewhere. Instead, we ask that you merely list the three (or less) games which you've spent the most time with *since* you received your last issue of The *GENERAL*. With this we can generate a consensus list of what's being played. The degree of correlation between the Best Selling Lists and the Most Played List should prove interesting.

Feel free to list any game regardless of manufacturer. There will be a built-in bias to the survey because you all play our games to some extent but it should be no more prevalent than similar projects undertaken by other magazines with a special interest-based circulation. The amount to which this bias affects the final outcome will be left to the individual's discretion.

The games I've spent the most time playing during the past two months are:

1. _____
2. _____
3. _____

CONTEST #140

Contestants are to indicate the moves of the three units below in a manner to give Bradley the best chance to destroy the Lock Gates:

Unit	Move To
Haines	
Newman	
Hodgson	

St. Nazaire Basin
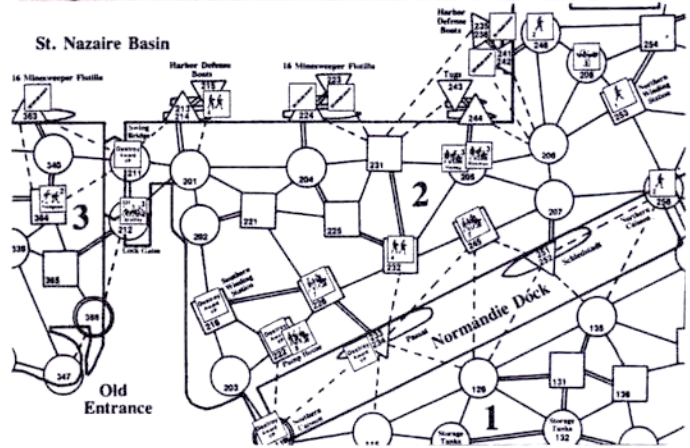
Issue as a whole . . . (Rate from 1 to 10, with 1 equating excellent, 10 equating terrible)
Best 3 Articles

1. _____
2. _____
3. _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

1988 GENERAL READERS' SURVEY

As explained in the "Philosophy" of this issue, we are considering a number of changes in the content and format of The *GENERAL*—and we'd like the imput of the readership concerning such changes. And, we'd love to know your views on what we've done thus far. After all, you folk are the best and most knowledgeable critics we face. Because we don't do this very often, we're willing to "pay" you to fill out and return this survey; any order for $10.00 or more accompanied by a completed survey may deduct $2.00 from the cost of that order (offer void after 1st August 1988). This is the chance to make your collective voice heard. Please take a few moments to jot down your thoughts.

Some of our regular features have been around a long time. Of course, such columns provide the framework for our longevity. Please indicate whether you regularly read (or would like to see more of) the following by checking the appropriate box:

AH Philosophy:	☐ Yes	☐ Expand	☐ No
Letters to the Editor:	☐ Yes	☐ Expand	☐ No
Opponents Wanted Ads:	☐ Yes		☐ No
Game Contests:	☐ Yes		☐ No
Question Box:	☐ Yes	☐ Expand	☐ No
Convention Calendar:	☐ Yes		☐ No
AREA Top 50 Listing:	☐ Yes		☐ No
AREA Meet the 50:	☐ Yes	☐ Expand	☐ No
Infiltrator's Report:	☐ Yes	☐ Expand	☐ No
Back Issue Listing:	☐ Yes		☐ No
New Product Ads:	☐ Yes	☐ Expand	☐ No
ASL Scenarios:	☐ Yes	☐ Expand	☐ No
Table of Contents:	☐ Yes	☐ Expand	☐ No
So That's What You've Been Playing:	☐ Yes	☐ Expand	☐ No
Readers Buyers Guide:	☐ Yes	☐ Expand	☐ No

There are other occasional features that appear that support The *GENERAL* which entail quite a bit of work. Please indicate if you'd like to see these continue or end:

Editor's Choice Award:	☐ Continue	☐ Suspend
AH Best Sellers List:	☐ Continue	☐ Suspend
GENERAL Index:	☐ Continue	☐ Suspend

Thre is inevitably a bit of controversy over the "types" of articles we should include or not each issue. Some types of articles have been immensely popular, and others once common have disappeared for lack of interest. Please indicate whether you like, or would like to see, the following types of articles in our pages:

Strategy/Tactics:	☐ Yes	☐ No
PBM Systems:	☐ Yes	☐ No
Historical:	☐ Yes	☐ No
Statistical/Analytic:	☐ Yes	☐ No
Convention Coverage/Reports:	☐ Yes	☐ No
Variants:	☐ Yes	☐ No
New Scenarios:	☐ Yes	☐ No
Series Replays:	☐ Yes	☐ No
Staff Briefings/Interviews:	☐ Yes	☐ No
Humorous:	☐ Yes	☐ No
Designer's Notes:	☐ Yes	☐ No
Military Book Reviews:	☐ Yes	☐ No
Reports on Works in Progress:	☐ Yes	☐ No

As anyone who has been reading The *GENERAL* very long will appreciate, there is also some debate over the types of games from our extensive line that coverage should be provided for in these pages. Would you like to see articles on the following types of games:

TAHGC Wargames:	☐ Yes	☐ No
TAHGC Non-Wargames:	☐ Yes	☐ No
(e.g., TV WARS and 1830)		
VG Wargames:	☐ Yes	☐ No
TAHGC Sports Games:	☐ Yes	☐ No
TAHGC Sci-Fi Games:	☐ Yes	☐ No
TAHGC Fantasy Games:	☐ Yes	☐ No
TAHGC Computer Games:	☐ Yes	☐ No
TAHGC Role-Playing Games:	☐ Yes	☐ No

In the past, The *GENERAL* has featured several on-running regular columns. These have usually been short, and devoted to one game such as *SL/ASL* or *DIPLOMACY*. Would you enjoy a regular column on the following:

Advanced SL:	☐ Yes	☐ No
DIPLOMACY:	☐ Yes	☐ No
TAHGC Classic Games:	☐ Yes	☐ No
(STAL, AK, WAT, DD, WAS, etc.)		
TAHGC Computer Games:	☐ Yes	☐ No
Solitaire Games:	☐ Yes	☐ No
SF/Fantasy Games:	☐ Yes	☐ No
THIRD REICH:	☐ Yes	☐ No
FIREPOWER:	☐ Yes	☐ No
MAGIC REALM:	☐ Yes	☐ No
TAHGC Leisure Games:	☐ Yes	☐ No
Modern Era Wargames:	☐ Yes	☐ No
TAHGC Role-Playing Games:	☐ Yes	☐ No

While we're at it, there are a number of other format changes that have been mentioned in some of our brainstorming sessions. We'd like your imput:

Cartoons:	☐ Yes	☐ No
Yearly Die-Cut Counter Sheet for Variants:	☐ Yes	☐ No
Illustrations/Maps:	☐ More	☐ Less
Larger Typeface:	☐ Yes	☐ No
Including "For Sale" Want Ads again:	☐ Yes	☐ No
Include VG Wargames in RBG Survey:	☐ Yes	☐ No

Finally, a spot for you to sound off—what other kind of material or layout changes would enhance your enjoyment of The *GENERAL*?

_____
_____
_____

On another, but related subject, we have decided to proceed with an *ASL Annual*—a 48-page, yearly publication devoted exclusively to *SL* and *ASL*. But some questions still need to be resolved. Answers to the following would be helpful in determining format and layout of this project:
Do you play *SL* and its gamettes regularly? _____
Do you play *ASL* and its gamettes regularly? _____
What percentage of such a publication should be devoted to *SL* as opposed to *ASL*?

_____

Would you buy such a publication at $10.00? _____
Would you submit articles/scenarios to such a publication? _____
Which of the following titles (one only) would you prefer for such a publication:

☐ Squad Leader G2	☐ Assault (with the "A", "S" and "L" highlighted)
☐ Sarge	☐ Squad Leader Diary
☐ The Berserker	☐ RASL-DASL
☐ In the Field	☐ Morale Check!
☐ Ten Minus Three	☐ Advancing Fire
☐ Forward Observer	☐ Advance Fire
☐ On the Front Line	☐ First Fire
☐ The Firing Line	☐ Prep Fire
☐ Baptism of Fire	☐ Rally Phase
☐ In the Line of Duty	☐ Advance
☐ The Corporal	☐ Squad Briefings
☐ The Sargeant	☐ Over the Top
☐ The Squad Leader Briefing	☐ Squad Leader 19** (with the last digits reflecting
☐ Tac Rep	the year)

Please indicate whether the following would make you more likely to purchase a new game:

Vanished (glossy) Counters:	☐ Yes	☐ No
Vanished (glossy) Mapboards:	☐ Yes	☐ No
Bookcase Boxes:	☐ Yes	☐ No
Flat Boxes:	☐ Yes	☐ No
Solitaire Rating on Box:	☐ Yes	☐ No
Complexity Rating on Box:	☐ Yes	☐ No
PBM Rating on Box:	☐ Yes	☐ No
Introductory Rules Set:	☐ Yes	☐ No
Multi-player Design:	☐ Yes	☐ No

For *THIRD REICH* owners only, would you like to see a 5th Edition rulebook offered for sale, or prefer having the recommended changes just printed in The *GENERAL*? As an alternative, there is the more expensive approach of a *THIRD REICH* Expansion Kit, which would include the new rulebook as well as updated parts (i.e., counters). Which would you prefer:
☐ Rulebook ☐ The *GENERAL* ☐ Expansion Kit

For *ASL* owners only, would you buy a set of 16 updated *SL* scenarios revised in the new *ASL* format for $10.00, or prefer to continue receiving them as free inserts in The *GENERAL* (or the *ASL* annual) on an occasional basis?
☐ Scenario Pad ☐ The *GENERAL*

Please indicate (i.e.: 1—first, 2—second, etc.; X—not at all) the order in which you would like to see the followng products released:

_____ ASL Japanese Module
_____ ASL French Module
_____ Contemporary ASL
_____ ASL Solitaire System
_____ ASL PBM System
_____ "M-1" (a solitaire modern-era version of *PATTON'S BEST*)
_____ "MBT" (a modern-era squad-level, individual vehicle game)
_____ "Red Sky at Morning" (modern-era strategic naval game)
_____ "Global Domination" (modern-era *CIVILIZATION*)
_____ Updated PB/PL system with new Desert Module
_____ "The Rising Sun" (Pacific version *THIRD REICH*)
_____ "Tarawa" (solitaire WW2 island invasion, aka *ST. NAZAIRE*)

We are concerned that the standards of competitive play of our peculiar brand of games has slipped a bit in past years. Would you attend an annual Baltimore-based mini-convention devoted to competition ("Championships") in Avalon Hill/Victory Games products? Emphasis would be on top-level competition and fun, and player fees would be minimal ($5.00 for weekend and no tournament costs). Tournaments would be gamemastered by top playtesters, designed to test the mettle of the participants.

☐ Yes—I would attend such a "Championship" convention.
☐ No— I would not attend such a convention.

Finally, a last request. The editors are contemplating a special 25th Anniversary issue of The *GENERAL*, celebrating this milestone in hobby history. We're looking for brief columns from, among others, readers who can express what their subscription to this oldest of hobby periodicals has meant to them. Please answer the following:
How long have you subscribed to The *GENERAL*? _____
Would you be willing to draft a few paragraphs on what it has meant to you or perhaps express an interesting anecdote? _____
(Please include your name and address if willing. Thanks.)

BUCHHOLZ STATION

BUCHHOLZ, GERMANY, 16 December 1944: The original German opening for the Battle of the Bulge was somewhat subdued. German infantry, with little armor support, was to seize key road junctions early so the armored formations could quickly pass through and exploit a breakthrough. One such place was the town of Buchholz, which sat alongside an abandoned railroad. It was held by a company of American infantry who were lined up for chow outside the town when a company of the German 27th Fusilier Regiment came down the road. Neither side expected to find the other here, and there was a dramatic moment of mutual surprise as both sides scrambled to deploy.

BOARD CONFIGURATION:

N ↑

	4
	3
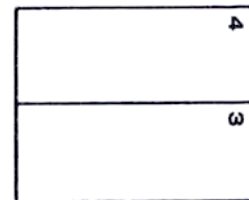
VICTORY CONDITIONS: The side that forces the other to retreat first is considered the winner. A side is forced to retreat the instant it has lost 13 Casualty VP. If, by the end of the scenario, neither side has forced the other to retreat, the game is considered an American victory—provided the Germans have not Exited ≥ 9 VP worth of units off the south edge of Board 3 along either road. If the German player does exit ≥ 9 VP off either/both road(s), he wins immediately.

BALANCE:

✚ Increase the German ELR to 4.

☆ Increase the US ELR to 4.

TURN RECORD CHART

Simultaneous Set Up ☆ [115]	1	2	3	4	5	6	7	8	9	10	END
✚ German Moves First [120]											

Advance Company of Fusilier Regiment 27, 12th Volksgrenadier Division [ELR: 3] set up as indicated: {SAN: 2}

4Y10: — 4Z9: — 4Z8: — 4AA8: — 4EE6: — 4EE7: — 4FF5: — 4BB7: — 4DD5: — 4FF4: — 4DD6: — 4CC7:

Company L, 3rd Battalion, 394th Infantry Regiment, 99th Infantry Division [ELR: 3] set up as indicated: {SAN: 4}

3Y9: — 3Z6: — 3W2: — 3P7: — 3R5: — 3R6: — 3Q8: — 3S7: — 3R7:

SPECIAL RULES:

1. EC are Moderate, with no wind at start.

2. All American vehicles start in Motion, and facing due east.

3. The dm .50-cal HMG must set up as a Passenger in the Jeep.

AFTERMATH: The fighting opened about 0700, but neither side was able to gain a decisive advantage. Losses were given and taken; the battle would probably go to the first side to receive reinforcements. Surprisingly, it was the Americans who were reinforced first when both Company K and a section of M-10 TDs arrived to bolster their position. The Germans promptly withdrew. Tactically, it was a draw with moderate casualties taken by both sides. Strategically, it was another of the small American victories that would add up to German frustration in the early hours of the Battle of the Bulge.

THE BITCHE SALIENT

ASL Scenario J

BITCHE, GERMANY, 14 January 1945: Elements of the 29th Infantry Division had been ordered to continue closing the ring around German forces trapped near Bitche. However, due to poor radio security, the Germans were quite aware of this latest development and had planned a flanking attack by elements of the 11th Mountain Regiment in an attempt to ambush the advancing Americans.

BOARD CONFIGURATION:
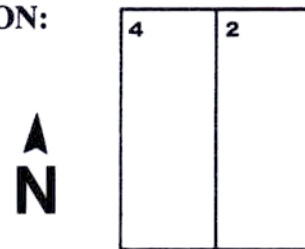
VICTORY CONDITIONS: To win, the American player must clear a contiguous road (free of Good Order German MMC on or adjacent) from the east edge of Board 2 to the west edge of Board 4, *or* amass at least 20 more Casualty VP than does the German player at scenario end.

BALANCE:

✛ Substitute a 9-2 leader for the on-board 9-1 leader, *and* change the 80+mm OBA to a 100+mm OBA.

☆ Substitute a 9-2 leader for the Turn 5 9-1 leader, *and* allow the 80+mm OBA Plentiful Ammo.

TURN RECORD CHART

☆ U.S. Sets Up First [154]	**1**	✛**2**	**3**	☆**4**	☆**5**	**6**	☆**7**	☆**8**	**9**	**10**	END
✛ German Moves First [220; see SSR 6]											

☆ (American)

Elements of 3rd Battalion, 175th Infantry Regiment [ELR 3] set up on Board 4 in hexes numbered 1-5 in hexrows C-DD: {SAN: 2}

6³-6-6 (14)	9-2	9-1	8-1	8-0	HMG 8-16 (2)	HMG 6-12	MMG 4-10 (4)	BAZ 45 8-5 (3)	Radio 8

Elements of 2nd Battalion, 175th Infantry Regiment enter on Turn 5 on east edge:

6³-6-6 (11)	9-1 (2)	8-0 (2)	7-0	MMG 4-10 (4)	BAZ 45 8-5 (4)	Radio 8	105 (14)	10PP *AAMG -/-/12* (20)	15PP T6 *AAMG -/-/4 (20)

Elements of 1st Battalion, 175th Infantry Regiment enter on Turn 8 on east edge:

6³-6-7 (5)	9-2	9-1	8-1	HMG 6-12	MMG 4-10	BAZ 45 8-5	T5 29PP (28) (2)	T10 9PP (37) (2)

✛ (German)

Company 5, Jaeger Bataillon I, Gebirgsjaeger Regiment 11 [ELR 3] set up on any whole hexes of Board 2: {SAN: 4}

4¹-6-7 (6)	9-1 (2)	8-0 (2)	MMG 5-12 (3)	LMG 3-8	Radio 8	Foxhole 5 OVR, OBA: +4 Other: +2 (8)	MPh/RtPh: dr = MF CC: +1/−1 (8)

Elements of Jaeger Bataillon II, Gebirgsjaeger Regiment II enter on Turn 2 along either North *or* South edge:

4¹-6-7 (15)	9-2 (2)	8-1	8-0 (2)	HMG 7-16	MMG 5-12 (2)	LMG 3-8 (6)	75L -/4*/1* (13)	15PP T7 AAMG -/-/3 (16) (3)	T7 21PP (28) (2)

SPECIAL RULES:

1. EC are Wet with no wind at start.

2. Because they are making a dispersed advance, no American MMC initially placed on board may be stacked together or adjacent to another MMC. No such restriction is placed on SMC/SW.

3. The StuG III is equipped with Schuerzen (D11.2).

4. One module of 80+mm Mortar OBA with Plentiful Ammo becomes available to the Americans on Turn 4. One module of 100+mm OBA becomes available to the Americans on Turn 7.

5. The Germans receive one module of 80+mm Mortar OBA, and one Pre-Registered hex (which must be recorded prior to U.S. set-up).

6. If Battlefield Integrity is being used, it does not apply for German losses until the American Player Turn of Turn 2.

AFTERMATH: The GIs were caught off balance, and were hit by accurate artillery fire in conjunction with the flanking attack. To attempt to restore the situation, the Americans quickly committed the 2nd Battalion and elements of the 1st Battalion to support the hard-pressed 3rd Battalion. This American reaction forced the Germans to release their death grip on the 3rd, but the American force had been badly mauled nonetheless; five companies had been effectively put out of action. As a result, the Americans pulled back the entire 175th for a much needed rest.